

SEAC January General Meeting

2017 SCHEDULE

Meetings

Renaissance Hotel 3801 Quebec St. Denver, CO January 19 March 16 May 18 July 20 September 21

Annual Meeting:

November 9, 2017

Board of Directors:

Martin/Martin, Inc. 12499 W. Colfax Ave Lakewood, CO 80215 Time: 7:30am January 5 February 2 April 5 June 1 August 3 October 5

Web-Based Board Meetings

March 2 May 4 July 6 September 7 November 2

Business Management Committee

Martin/Martin, Inc. 12499 W. Colfax Ave Lakewood, CO 80215 February 9 April 13

June 8

August 10

October 12

January 19, 2017

Located at the Renaissance Hotel

Happy New Year!

Please join us for our first 2017 SEAC general meeting!

Subject: SEAC—Your organization

Are you interested in learning more about renovating existing buildings? Do you want to have a say in the next AISC Specification for Architecturally Exposed Structural Steel? Would

you like to be in a study group to prepare for the SE exam? Do you want to have a say in Denver's building code amendments? Or would you like to volunteer to evaluate structures after a disaster?

Come to the January General Meeting where you will learn about these opportunities and many more. Each SEAC committee will make a short presentation explaining their mission and invite you to join their efforts.



Susie Jorgensen, who serves on the board of the National Council of Structural Engineering Associates (NCSEA), will give us an update on activities at the national level, and Paul Doak will report on SEAC's focus in 2017.

RSVP January 2017 MEETING

January 19, 2016 Breakfast at 7:30 a.m. Renaissance Hotel 3801 Quebec Street, Denver, CO 80207

RSVP by 5pm Tuesday, January 17 on the SEAC website

BOARD OF DIRECTORS

Structural Engineers Association of Colorado



Paul Doak
President
Martin/Martin, Inc.
303-431-6100

pdoak@martinmartin.com



Jeannette Torrents

VP/Treasurer

JVA, Incorporated

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jtorrents@jvajva.com



Jeremy Crandall
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jeremy @sci-Denver.com



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Wiss, Janney, Elstner
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bcook@wje.com



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Rob Jackson

Director

AECOM

303-843-2850

rob.jackson@aecom.com



Donald Harvey
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Atkinson-Noland &
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303-444-3620

dharvey@ana-usa.com

We Want to Hear from YOU! The SEAC Board of Directors is interested in hearing your suggestions, comments, and ideas. Please feel free to contact a member of the BOD at any time.

Thank you to all of our members who continue to support SEAC!

PRESIDENT'S MESSAGE

Structural Engineers Association of Colorado

elcome to 2017 and my first time at writing the President's Message. I am honored to serve as your president and look forward to a successful 2017 for SEAC.

I would like to say Thank You to our two outgoing board members—Susie Jorgensen and Don Carroll. Their insights, perspectives, and humor have benefited the organization.

And join me in welcoming our two new board members—Jeremy Crandall as Secretary and Donald Harvey as Director. Congratulate them and thank them for serving your organization. I would also like to recognize the members of the Nominating Committee—Jerry Maly, Ben Nelson, and Brent Norris. This committee once again provided a strong slate of candidates.

For those of you that missed it, the structural engineering profession and SEAC in particular was in the news recently. Our very own Jeremy Crandall was interviewed by 9NEWS for their piece on the SEAC Gingerbread Bridge Competition <u>9News-Next with Kyle Clark-Structural Engineers take on Gingerbread</u>. What wonderful exposure for our profession! Thank you to all who worked to make the competition successful, especially Jeremy. And I should add it was the SCI bridge that held the most weight, so congratulations to SCI for advancing the structural properties of gingerbread and edible adhesives!

Join me in thanking Michelle Mishkar for her service to SEAC during 2016. Michelle assisted the Treasurer in keeping the books, and assembled the newsletter, fliers, and e-mails. Michelle was the person behind seacnews@martinmartin.com. Michelle's duties will be taken over by Katharine Sparhawk. Katharine has already started work for SEAC including creating this newsletter. Welcome Katharine.

SEAC also has a new member setting up and running the WebEx broadcast of out General Meetings and Fall Seminar. Richard Huddleston is the man under the earphones. He is taking over for David Poe, who has provided this service free of charge for many years. We owe David a great deal of gratitude for his many early mornings setting up before each meeting. Thank you, David.

The January General Meeting will focus on your organization. Come and learn about SEAC's committees, SEAC's relationship to NCSEA, and news from the NCSEA conference last fall. SEAC committee representatives will be present to answer your questions and invite you to join them. This is your opportunity to "lean-in" to your organization. I look forward to seeing you there.

Sincerely,

EMPLOYMENT OPPORTUNITIES

Structural Engineers Association of Colorado



Tech for WebEx Broadcasting:

SEAC is looking for a 2nd qualified person to support the organization as a backup WebEx broadcasting technician. This person would step-in and run the broadcast if the first technician is unable. The job activities could include:

- Coordinating with the hotels A/V personnel on equipment and services that SEAC has contracted for.
- Setting up SEAC equipment, running and monitoring the WebEx broadcast throughout the event, trouble shooting and breaking down the equipment at the conclusion.
- Time commitment could be from 6:30 to 9:30 am for any of the five general meetings per year, or from 6:00 am to 1:00 pm for the annual fall seminar.

If the backup person takes responsible charge of the broadcast the compensation will be \$250 for a full general meeting, and \$500 for a full fall seminar. Partial backup periods will receive partial compensation.

If you are interested, or if you know someone who might be, please contact Caryn, Katharine, or any Board member for further details.

ANNOUNCEMENTS

Structural Engineers Association of Colorado

Welcome to our Newest Members

Nabeal Khatib (Student Member)

Geoff Burrell (Professional Member)
Martin/Martin Consulting Engineers

John Partch (Professional Member) SGM, Inc.

2017 MEMBERSHIP DUES!

Pay Online today!

Thank you to our young members who participated in this years Gingerbread Bridge Challenge!

Preparations for our 2017 event are already in the works!

People's Choice

1st - Wallace Wonka World (Wallace Engineering)

2nd - Iron Sharpens Iron (Landing Place Church)

3rd - Anchored in Zen (Anchor Engineering, Inc.)

See attached results from our winners!

Architectural Design

1st - Build Bridges, Not Walls (Structural Consultants, Inc.)

2nd - Iron Sharpens Iron (Landing Place Church)

3rd - Anchored in Zen (Anchor Engineering, Inc.)

Honorable Mention - Make Gingerbread Great Again (Wiss, Janney, Elstner Associates, Inc.)

Structural Design

1st - 48.45 Ratio - Build Bridges, Not Walls (Structural Consultants, Inc.)

2nd - 30.51 Ratio - Make Gingerbread Great Again (Wiss, Janney, Elstner Associates, Inc.)

3rd - 15.32 Ratio - Anchored in Zen (Anchor Engineering, Inc.)

please see the attached flyer for more information!

ANNOUNCEMENTS

Structural Engineers Association of Colorado



STRUCTURES CONGRESS 2017

Denver, Colorado | April 6-8





e invite you to attend Structures Congress 2017. Join 1,200 of your peers from the US and abroad for three days of networking and technical sessions at the Colorado Convention Center in Denver, CO, April 6–8, 2017.

Thursday begins with an exciting Opening Program where Greg MacGillivray, director of *Dream Big*, the new IMAX movie on engineering, will share with us behind-the-scene moments from filming, including flying over the Shanghai Tower. The Plenary Luncheons on Friday and Saturday will feature extraordinary keynote speakers Guillermo "Bill" Vidal, P.E., 44th Mayor of Denver, engineer, author, consultant, Past President and CEO of the Hispanic Chamber of Commerce of Metro Denver; and Charles H. Thornton, Ph.D., P.E., Hon.M.ASCE, consultant and Founding Principal of Thornton Tomasetti (see page 2).

Choose from 120 sessions during this year's technical program. Hear from the experts that developed ASCE 7-16 and other standards, learn about buildings, bridges, blast, natural disasters, materials, business practices, and much more. Learn about new tools and technology, and connect with vendors in the bustling Exhibit Hall that will include vendor demonstrations and a new Student Competition. This year's program also includes a Career Networking Event for students and employers. Earn PDHs, enjoy tours, and exciting social events. You will not want to miss the Friday Special Reception Celebrating the Future of SE hosted by CSI. Make sure you purchase this additional ticket.

Plan now to join us – and bring your colleagues – to Structures Congress 2017 in Denver to take advantage of all SEI/ASCE offers to equip and inspire you to lead and innovate in structural engineering.

We look forward to seeing you in Denver!

JOIN US TO:

- Learn from the experts
- Experience the new Student Competition
- Check out the 2017 Report Card for America's Infrastructure and ASCE 7 online
- Celebrate at the Friday Special Evening Reception hosted by CSI

.... And much more

SEAC

Structural Engineers Association of Colorado

IS YOUR COMPANY HIRING?

Consider placing an ad in the bi-monthly SEAC newsletter to reach over 300 members, including professional engineers, suppliers, and vendors.

To learn more, contact Katharine Sparhawk (SEACNEWS@MartinMartin.com)



SPONSORS!

Your Logo Could Go Here!

Do you know someone that would be interested in sponsoring a SEAC Meeting?

Education Committee

The SEAC Education Committee will organize the 3rd PE/SE Exam kick-off meeting the week of January 23.

At this point, we don't have a detailed start date. We will keep our members informed once one has been decided.

SEAC COMMITTEES... We Need You!

Structural Engineers Association of Colorado

Have you considered joining a committee?

Your participation is what makes our organization so successful. If you are interested in joining, please click on the hyperlinked name to contact

Committee	Chairperson	Contact Phone	Board Liaison		
ВІМ	<u>Dezi Mackey</u>	303.431.6100	Jeremy Crandall		
Building Dept. Liason	DORMANT		Rob Jackson		
Business Management	Paul Hause	303.399.5154	Paul Doak		
Construction Industry			Paul Doak		
Denver Building Dept.	Jerry Maly	303.914.4300	Rob Jackson		
Education	Irena Kahanek	720.296.7595	Jeannette Torrents		
Luddation	Chad Mitchell	720.407.1031	<u>Jeannette Torrents</u>		
Ethics	Peter Marxhausen	303.947.5375	<u>Donald Harvey</u>		
Membership	Jerry Maly	303.914.4300	Ben Cook		
Nominating	Jerry Maly	303.914.4300	Paul Doak		
Northern Colorado	Greg Black	970.619.8986	Greg Black		
Precast Concrete	Trevor Kirkley Graham Allen	303.298.1900	Paul Doak		
SEER	Brent Norris Mike Piper	303.860.9021 303.431.6100	Rob Jackson		
Scholarship	Jeannette Torrents	303.444.1951	Jeannette Torrents		
Seismic Standards	Rob Jackson	303.843.2850	Rob Jackson		
Snow Loads	Jeannette Torrents	303.444.1951	Jeannette Torrents		
Standard of Practice	Jim Ness	303.623.4927	Paul Doak		
Steel Materials	Ben Cook	303.914.4300	Ben Cook		
Wind Loads	Jeannette Torrents	303.444.1951	Jeannette Torrents		
Young Engineers	Jeremy Crandall	303.399.5154	Jeremy Crandall		
Toding Engineers	Katie Courtright	303.399.5154	Jeremy Grandali		
Existing Structures	Gene Stevens	303.860.9021	Donald Harvey		

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SEAC Current Financial Statement



SEAC 2017 Proposed Budget and Year over Year Comparison 2017 2016 2014 2013 2015 Actual Budget Actual Budget Actual Budget Actua Budget Actual Budget Income Dues - Membership Dues Affiliate Members 9,520.00 8,560.00 4,500.00 4,132.82 4,000.00 3,874.35 4,000.00 1,240.00 5,420.00 750.00 700.00 500.00 600.00 750.00 700.00 1.000.00 750.00 1.000.00 **Professional Members** 25.490.00 33.680.00 37.000.00 37.342.07 35.000.00 34.869.15 33.000.00 34.902.61 30.000.00 Dues collected in December 9.000.00 9.211.41 Student Members 660.00 540.00 0.00 0.00 0.00 0.00 180.00 0.00 120.00 Total Dues - Membership Dues 45,420.00 52,691.41 42,000.00 42,074.89 39,750.00 39,443.50 36,892.61 36,540.00 38.180.00 Business Mgmt. survey 800.00 **Annual Dinner Sponsor** 1.000.00 1.000.00 1.000.00 0.00 0.00 0.00 1.000.00 0.00 1.000.00 **Employment Advertisement** 1.000.00 1.000.00 1,162.89 1,000.00 1.648.95 500.00 500.00 1,000.00 **Fall Seminar** 21.000.00 20.740.00 16.000.00 21.714.67 10.500.00 14.864.56 9.500.00 10.705.00 8.000.00 **Fall Seminar Sponsor** 2,000.00 2,000.00 1,000.00 970.70 1,000.00 970.70 2,000.00 1,500.00 2,000.00 Fees - Annual Meeting 2.000.00 1.890.00 1.500.00 712.18 1.500.00 1.350.58 960.00 3.000.00 Fees - Breakfast Guests 500.00 459.12 600.00 719.34 600.00 560.00 550.00 Interest Income 24.00 24.17 0.00 47.46 50.00 46.36 50.00 51.30 50.00 1.896.00 golf tournament 1.800.00 Miscellaneous Income 0.00 2.050.00 1,000.00 1,047.92 100.00 900.00 100.00 851.08 25.00 **Education Committee 2016 Grant** 3,000.00 Sales - Breakfast Sponsors 2.000.00 0.00 2.000.00 1,000.00 3.500.00 1.941.40 3.500.00 3.750.00 4.000.00 Sales - Building Dept Survey 0.00 0.00 0.00 53.10 0.00 0.00 0.00 0.00 0.00 Sales - Snow Load Report 0.00 160.32 0.00 1,171.61 250.00 406.80 250.00 0.00 300.00 Sales - Std. of Practice 0.00 0.00 0.00 82.28 0.00 28.83 100.00 0.00 100.00 Transfer Savings to Checking 0.00 3.500.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 Total Income 0.00 76,044.00 87,951.90 66,000.00 70,496.82 59,250.00 63,321.02 57,780.00 55,769.99 56,565.00 **Expense** 2.200.00 1.250.00 1.250.00 2.422.65 1.200.00 3.385.50 1.250.00 1.250.00 1.200.00 Accountant Awards 350.00 1,314.24 500.00 772.84 500.00 415.00 500.00 0.00 500.00 25.00 0.00 25.00 107.00 25.00 0.00 100.00 **Bank Charges** 0.00 0.00 **Committee Expenses** 1.820.00 1,371.26 1,500.00 1,379.42 1,500.00 743.73 2.500.00 1.243.44 4.000.00 2017 Education Committee Grant expenses 4.200.00 Contract Labor 14.950.00 14.380.00 14.000.00 11.562.79 9.900.00 9.900.00 9.900.00 9.900.00 9.900.00 Conventions 3.600.00 5.300.09 3.250.00 3.858.52 3.250.00 3.123.44 3.000.00 1.516.88 3.200.00 NCSEA Fall Summit scholarship 0.00 Meetings - Annual Lunch/Dinner 7,000.00 7,725.00 7.500.00 7,250.00 6,000.00 7.080.00 3.500.00 2,793.68 3,500.00 1.500.00 Meetings - Business Practice 1.600.00 1.842.73 1.908.35 1.500.00 1.084.74 1.500.00 1.666.00 1.300.00 Meetings - Fall Conference 9.800.00 9.000.00 8.200.32 9.000.00 9.304.17 7.000.00 6.000.00 16,500.00 17,000.00 17,105.18 14,500.00 13,543.17 14,299.08 14,000.00 Meetings - General Membership 14,750.61 14,500.00 Messenger Services 0.00 0.00 0.00 50.00 300.00 370.00 Miscellaneous 730.00 1,320.96 0.00 300.00 300.00 296.00 600.00 NCSEA Committees 0.00 0.00 0.00 0.00 0.00 37.50 0.00 0.00 600.00 NCSEA Dues 5,400.00 5.280.00 6,500.00 5,220.00 5,000.00 4.880.00 5,000.00 4,920.00 4,600.00 Office Supplies 0.00 0.00 300.00 0.00 300.00 32.04 300.00 263.79 200.00 Postage 0.00 0.00 25.00 22.00 100.00 Print/Postage New Mmbr. Binders 0.00 61.23 500.00 300.00 500.00 800.00 300.00 300.00 300.00 Gen Mtg Speaker Fees/Exps 0.00 0.00 500.00 0.00 500.00 0.00 1,200.00 2,312.20 668.00 Webcast IT/Laptop (excluding labor fees) 2.571.76 1.000.00 0.00 500.00 1.366.81 2.400.00 1.460.90 **SEAC Scholarship Fund Donation** 0.00 0.00 1.000.00 832.01 1.000.00 4.832.01 1,000.00 1.000.00 1.000.00 Survey - Business Practice 800.00 800.00 500.00 0.00 500.00 500.00 500.00 500.00 900.00 Reimursement (snow load reports) 1.171.61 Square Fees & PayPal fees 1.500.00 1.500.00 2,000.00 Web Site 6.699.00 7.798.14 8.100.00 940.20 3.000.00 3.260.00 3.000.00 1.247.75 4.000.00 **Total Expense** 0.00 79,817.00 79,778.77 75,421.61 60.579.63 59.050.00 62,629,61 57,725.00 54,792.23 56,050.00 Net Income 0.00 -3,773.00 8,173.13 -9,421.61 9,917.19 200.00 691.41 55.00 977.76 515.00

Gingerbread Bridge Results



2016 LOAD/WEIGHT FINAL RESULTS



Testing Order	BRIDGE TEAM	BRIDGE NAME	BRIDGE WEIGHT	BRIDGE HEIGHT (IN.)	BRIDGE WIDTH (IN.)	LOADING APPARATUS	MAX TEST LOADS	TOTAL LOAD	TOTAL LOAD/ WEIGHT
3	Anchor Engineering	Anchored in Zen	5.8 lbs	11.50	2.25	0.5 lbs	88.4 lbs	88.9 lbs	15.32
9	CSM-Sponsored by ASCENT Group	5 Days or Less	13.9 lbs	5.00	5.00	2.5 lbs	2.2 lbs	4.7 lbs	0.33
8	CSM-Sponsored by SCI	Ginger-Gate Bridge	16.7 lbs	12.00	2.00	0.0 lbs	2.6 lbs	2.6 lbs	0.16
	CSM-Sponsored by Trimble		N/A	N/A	N/A	0.0 lbs	0.0 lbs	0.0 lbs	N/A
2	CSM-Sponsored by WJE	Clear Creak	4.5 lbs	1.50	4.50	0.0 lbs	0.0 lbs	0.0 lbs	0.00
7	Hayward Baker	3 Wise Men	10.4 lbs	13.00	1.25	0.0 lbs	46.5 lbs	46.5 lbs	4.47
6	KL&A	Cross Laminated Ginger	N/A	N/A	N/A	0.0 lbs	0.0 lbs	0.0 lbs	N/A
4	Landing Place Church	Iron Sharpens Iron	4.2 lbs	11.75	3.50	0.3 lbs	42.4 lbs	42.7 lbs	10.15
	Martin/Martin	The Desserted Bridge	N/A	N/A	N/A	0.0 lbs	0.0 lbs	0.0 lbs	N/A
10	Structural Consultants Incorporated	Build Bridges, Not Walls	17.4 lbs	12.00	3.50	0.5 lbs	842.5 lbs	843.0 lbs	48.45
	Structural Consultants Incorporated 2015	Troll's Trip Trap Trouble	27.0 lbs	12.00	3.50	0.0 lbs	665.3 lbs	665.3 lbs	24.64
1	Wallace Engineering	Wallace Wonka World	6.2 lbs	12.00	5.50	0.3 lbs	80.1 lbs	80.4 lbs	12.96
5	Wiss, Janney, Elstner	Make Gingerbread Great Again	11.3 lbs	12.00	2.50	0.3 lbs	344.5 lbs	344.8 lbs	30.51

NOTES:

- Bridges with N/A for bridge weight and dimensions failed prior to reaching the testing site.
 Bridges with 0lb for total load failed under self-weight when placed in the test rig.
- 3. Items in RED indicate that bridge is out of compliance with this year's competition rules.
- 4. 2015 SCI bridge weight is based on data recorded at 2015 GBBC.

LOADING APPARATUS							
ITEM	WEIGHT						
Sugar Bag	0.2						
1" block	0.25						
3" block	0.5						
6" block	1						
9" block	1.7						
12" block	2.2						



Structures Congress 2017 April 6-8, 2017 Denver, Colorado

Premier Event for Structural Engineers

Register Today

Reasons to Attend:

- Learn valuable information in the technical sessions including; ASCE 7-16, Bridges, Claims, Business Practice, Ethics, Seismic, Natural Disasters, CASE Risk Management, and more
- Earn up to 17.5 PDH's
- Attend the Evening Reception Celebrating the Future of SE hosted by CSI- make sure you purchase your additional ticket
- Network at the New Thursday morning Plenary Program and the Friday and Saturday Plenary Luncheons
- Attend a Short Course or Tours
- Students and Young Professionals, take this opportunity to meet top-level Structural Engineers and learn how to enhance your career. New Programs offered this year.

Consider all the registration options- Flex Registration might interest your company

Hiring Structural Engineerslearn about a new opportunity



STRUCTURES CONGRESS 2017

Denver, Colorado | April 6–8, 2017

Structural Engineering Institute of ASCE

CASE Spring Risk Management Convocation



REFETC TO LANGUE EARN UP TO 17.5

REGISTER BY FEBRUARY 15 TO SAVE

JOIN US TO:

- Learn from the experts
- **■** Experience the new Student Competition
- Check out the 2017 Report Card for America's Infrastructure and ASCE 7 online
- Celebrate at the Friday Special Evening Reception hosted by CSI
 - ... and much more



Hyatt Regency Denver | Colorado Convention Center

f www.structurescongress.org

SCHEDULE AT A GLANCE (subject to change)

WEDNESDAY, APRIL 5

8:00 a.m. – 11:00 p.m. Committee Meetings

Noon – 6:00 p.m. Registration

1:00 – 5:00 p.m. **Pre-Conference Seminars**

1:45 – 3:30 p.m. Tour: Denver Performing Arts Complex

1:00 - 5:00 p.m. Exhibitor Move-In

THURSDAY, APRIL 6

6:30 a.m. - 6:00 p.m. Registration and ASCE Bookstore

7:00 – 8:00 a.m. Meet the Leaders Program for Students and Young

Professionals

7:30 – 8:00 a.m. Continental Breakfast in Exhibit Hall

7:30 a.m. – 6:30 p.m. Exhibit Hall, Vendor Demonstrations and Poster Display

8:00 a.m. – 11:00 p.m. Committee Meetings

8:15 –9:15 a.m. Opening Plenary Program

9:30 – 10:30 a.m. Concurrent Technical Sessions 10:30 – 11:00 a.m. Refreshment Break in Exhibit Hall

11:00 a.m. -12:30 p.m. Concurrent Technical Sessions

12:30 – 1:30 p.m. Exhibit Hall Lunch

1:30 – 3:00 p.m. Concurrent Technical Sessions
3:00 – 3:30 p.m. Refreshment Break in Exhibit Hall
3:30 – 5:00 p.m. Concurrent Technical Sessions
5:00 – 6:30 p.m. Welcome Reception in Exhibit Hall

FRIDAY, APRIL 7

7:00 a.m. – 5:00 p.m. Registration and ASCE Bookstore

7:30 a.m. – 4:00 p.m. Exhibit Hall, Vendor Demonstration, Student Competition,

Poster Display (closed 11:30 a.m. – 1:45 p.m.)

7:30 – 8:00 a.m. Continental Breakfast in Exhibit Hall

8:00 a.m. - 11:00 p.m. Committee Meetings

8:00 – 9:30 a.m. Concurrent Technical Sessions

8:00 a.m. - 5:30 p.m. CASE Convocation

9:30 – 10:00 a.m. Refreshment Break in Exhibit Hall 10:00 – 11:30 a.m. Concurrent Technical Sessions

11:30 a.m. – 1:45 p.m. Plenary Luncheon and Awards Program

2:00 – 3:30 p.m. Concurrent Technical Sessions
3:30 – 4:00 p.m. Refreshment Break in Exhibit Hall
4:00 – 5:30 p.m. Concurrent Technical Sessions
4:30 – 6:00 p.m. SEI Student Career Networking Event

6:30 – 11:00 p.m. Evening Reception Celebrating the Future of SE hosted by CSI

— additional ticket required

SATURDAY, APRIL 8

7:00 a.m. – 12:30 p.m. Registration and ASCE Bookstore

7:30 – 8:00 a.m. Continental Breakfast in Registration Area

8:00 a.m. - 11:30 a.m. Committee Meetings

8:00 – 9:30 a.m. Concurrent Technical Sessions

9:30 – 10:00 a.m. Refreshment Break in Registration Area

10:00 - 11:30 a.m. Concurrent Technical Sessions

11:30 a.m. – 1:45 p.m. Closing Plenary Luncheon and SEI Annual Business Meeting

3:00 – 5:30 p.m. Tour: Train to the Plane and the DIA Hotel and Transit Center

3:00 – 4:30 p.m. Tour: Denver Commuter Rail Maintenance Facility

PARTNERING ORGANIZATIONS









COOPERATING ORGANIZATIONS









IMPORTANT DATES

EARLY BIRD REGISTRATION DEADLINE (EB)

Wednesday, February 15

HOTEL RESERVATION DEADLINE

Wednesday, March 1

ADVANCE REGISTRATION DEADLINE (ADV)

Thursday, March 16

EXHIBITOR AND SPONSOR REGISTRATION DEADLINE

Thursday, March 16

Register early as space is limited for certain events.





YOUR INVITATION TO ATTEND

We invite you to attend Structures Congress 2017. Join 1,200 of your peers from the US and abroad for three days of networking and technical sessions at the Colorado Convention Center in Denver, CO, April 6–8, 2017.

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Plan now to join us – and bring your colleagues – to Structures Congress 2017 in Denver to take advantage of all SEI/ASCE offers to equip and inspire you to lead and innovate in structural engineering.

We look forward to seeing you in Denver!



James R. Harris, Ph.D., P.E., F.SEI, F.ASCE Congress Co-Chair J.R. Harris & Company



Abbie Liel, Ph.D., P.E., M.ASCE Congress Co-Chair University of Colorado Boulder

LOCAL PLANNING COMMITTEE

CO-CHAIR

James R. Harris, Ph.D., P.E., F.SEI, F.ASCE J. R. Harris & Company

CO-CHAIR

Abbie Liel, Ph.D., P.E., M.ASCE University of Colorado Boulder

MEMBERS

Aimee Corn, EIT, A.M.ASCE Gannett Fleming

Lacey Goetz, P.E., M.ASCE Integral Engineering Co.

Jennifer Goupil, P.E., F.SEI, M.ASCE SEI/ASCE

Evan Hammel, P.E., M.ASCE J.R. Harris & Company

Eric Herbert, EIT, M.ASCE Kiewit Engineering Company

Kristen Hess, Ph.D. Student, S.M.ASCE University of Colorado Boulder

Rob Jackson, P.E., SECB, M.ASCE AECOM

Susie Jorgensen, P.E., M.ASCE Studio NYL

R. Wayne Muir, P.E., M.ASCE Structural Consultants Inc.

NATIONAL TECHNICAL PROGRAM COMMITTEE

CHAIR

James Gregory Soules, P.E., S.E., P.Eng., SECB, F.SEI, F.ASCE CB&I LLC

MEMBERS

Sarah Vaughan-Cook, P.E., S.E., M.ASCE Cheng Lok Caleb Hing, Ph.D., P.E., F.SEI, F.ASCE

Michael Baker International

Jeremy Isenberg, Ph.D., P.E., NAE, F.SEI, Hon.M.ASCE Stanford University

Takahiko Kimura, P.E., F.SEI, M.ASCE CH2M

Mustafa Mahamid, Ph.D., P.E., S.E., F.SEI, F.ASCE

University of Illinois at Chicago

Shalva Marjanishvili, P.E., S.E., F.SEI, M.ASCE *Hinman Consulting Engineers, Inc.*

Brian McElhatten, P.E., S.E., M.ASCE

Bruce Peterson, P.E., F.SEI, F.ASCE Modjeski and Masters

John Francis Silva, P.E., S.E., F. SEI, M.ASCE

Hilti Inc.

Robert Smilowitz, Ph.D., P.E., F.SEI, M.ASCE Thornton Tomasetti

John Tawresey, P.E., S.E., F.SEI, F.ASCE, KPFF Consulting Engineers — Retired

Mark Waggoner, P.E., M.ASCE Walter P Moore & Associates

Eric Williamson, Ph.D., P.E., M.ASCE University of Texas at Austin

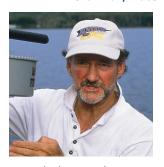
THURSDAY, APRIL 6 • 8:15 - 9:15 a.m.

Opening Plenary Program

Kick off Structures Congress 2017 by attending the opening plenary program. Hear from the conference cochairs, SEI leaders and a special keynote speaker.

Dream Big: Sharing the Wonder of Engineering to Inspire the Next Generation

Presenter: Greg MacGillivray, Director, Dream Big Chairman, MacGillivray Freeman Films



NEW!

Awe-inspiring structures and the engineers who bring them to life set the stage for *Dream Big*, the ASCE-sponsored IMAX® film. Join Academy-Award-nominated director Greg MacGillivray as he shares some of the most fascinating behind-the-scenes moments from filming

— including Bird's Nest Stadium in Beijing with ASCE Fellow Steve Burrows. Greg will discuss the powerful role of the immersive IMAX® experience in shaping young minds, and make the case for why it's so important for engineers to engage with audiences in informal education spaces like museums and science centers.

FRIDAY, APRIL 7 • 11:30 a.m. - 1:45 p.m.

Plenary Luncheon and Awards Program

Celebrate the achievements of this year's award winners, dine with colleagues and hear an outstanding keynote speaker.

Leadership Is a Personal Journey

Presenter: Guillermo "Bill" Vidal, P.E., 44th Mayor of Denver, engineer, author, consultant, Past President and CEO of the Hispanic Chamber of Commerce of Metro Denver



Guillermo "Bill" Vidal, P.E., will explore how the responsibility to lead and create a brave new world begins with each one of us. He will describe how true leadership is a personal journey that grows from our own experiences and propels us forward with the

determination to accomplish great things. He will reflect on his own experiences and what he has observed from great leaders. Be inspired! You will walk away with a brave, new outlook for your own journey to leadership.

Book signing following lunch, Boxing for Cuba: An Immigrant's Story.

Register early as the luncheon often sells out. Ticket required. Included in Full and Friday Registration Packages. Additional ticket fee: \$95.

SATURDAY, APRIL 8 • 11:30 a.m. - 1:45 p.m.



Closing Plenary Luncheon and SEI Annual Business Meeting

Enjoy lunch with your colleagues and end this conference with world-renowned keynote speaker Charlie Thornton. Also hear SEI President Andrew Herrmann, P.E., SECB, F.SEI, Pres.12.ASCE, on our progress to realize the Vision for the Future of Structural Engineering and congratulate the 2017 SEI Fellows.

A Career of Disruptive Innovation

Presenter: Charlie Thornton, founding principal of Thornton Tomasetti and founder of the ACE Mentor Program

Mr. Thornton will speak about his work pushing the Structural engineering profession forward.

Ticket required. Included in Full, Student, and Saturday Registration Packages. Additional ticket fee: \$95.

THURSDAY, APRIL 6 • 12:30 - 1:30 p.m. Buffet Lunch in Exhibit Hall

Enjoy lunch and visit with colleagues as you explore the wide range of products and services displayed in the Exhibit Hall.

Ticket required. Included in Full, Student and Thursday Daily Registration Packages. Additional ticket: \$50.

THURSDAY, APRIL 6 • 5:00 - 6:30 p.m. Welcome Reception in Exhibit Hall

The Structures Congress Welcome Reception is a fun opportunity to network with colleagues and visit the Exhibit Hall. Enjoy appetizers and drinks in a relaxed environment.

Ticket required. Included in Full, Student and Thursday Daily Registration Packages. Additional ticket: \$75.

The networking events and receptions, even if included in your registration package, are ticketed events. In order to receive your ticket, please RSVP by checking the event box when registering.

FRIDAY, APRIL 7 • 6:30 - 11:00 p.m.

Special Evening Reception Celebrating the Future of SE, hosted by CSI



Join us for a celebration of the future of structural engineering. Ashraf Habibullah, president and CEO of Computers &



Structures, Inc., will host a special dinner reception on Friday, April 7, in conjunction with the Structures Congress 2017.
The event will feature entertainment in celebration of the SEI Vision for the Future of Structural Engineering, leadership and initiatives that will revolutionize the future

of our amazing profession. Join Ashraf for an evening of fun, inspiration and fabulous prizes. You won't want to miss this! Ticket includes endlessly flowing champagne, live entertainment, full dinner, hosted bar, and amazing raffle prizes.

★ Additional tickets are required for this reception.

Tickets are available through MARCH 31. Regular tickets are \$30, and Student tickets are \$10. 100% of ticket sales will benefit the SEI Futures Fund.



THURSDAY, APRIL 6

Use the QR code to view the technical session details.



TRACK	CONCURRENT TECHNICAL SESSIONS 9:30 – 10:30 a.m.	CONCURRENT TECHNICAL SESSIONS 11:00 a.m. – 12:30 p.m.	CONCURRENT TECHNICAL SESSIONS 1:30 – 3:00 p.m.	CONCURRENT TECHNICAL SESSIONS 3:30 – 5:00 p.m.
BLAST & DISPROPORTIONATE COLLAPSE	Recent Developments in Blast Design & Analysis	Analysis & Testing for Blast Loading	Multi-Hazard Response of Structures Subjected to Extreme Loads	Structures Subjected to Impact Loads
WOOD & TIMBER/ BUILDING CASE STUDIES	Case-Studies: Recent Mass Timber Building Projects in North American	Fire Performance of Wood Structural Systems	Case Studies 1 — Building Retrofit Challenges	Building Case Studies 2 — Structural Design Challenges
SEISMIC/TALL BUILDINGS	Seismic Analysis	Behavior of Full-Scale RC Special Moment Frame Comp- onents Subjected to Collapse- Level Earthquake Loadings	Tall Buildings	Performance-Based Design of Tall Buildings: From Research to Applications
REINFORCED CONCRETE/ASCE CODES	Repair & Rehabilitation	ACI 562-16 A Code for Repair of Existing Concrete Structures	Meet the New ASCE 37-14 Design Loads on Structures During Construction Standard	ASCE 41-17: A First Look
BRIDGE PRACTICE	Pedestrian Bridges & Tunnels	Erection & Construction of Steel Bridges	Rehabilitation & Replacement	Monitoring, Serviceability & Smart Bridges
BRIDGE RESEARCH	Innovative Materials for Conrete Bridges	Retrofit & Rehabilitation of Bridges for Multiple Hazards	Connection Challenges Including Seismic Loading in Accelerated Bridge Construction	Seismic — Bridge Analysis
EDUCATION/ SUSTAINABILITY	Enhancing Recruitment of Graduate Students Through Active Organizational Participation	Designing Beyond Strength — Mentoring & Teaching the Importance of Aesthetics & Performance	Still in Use: Structural Engineering History & Contemporary Design Practice	Sustainability
RESEARCH	Condition Assessment of Structural Systems Under Service Loads	Health Monitoring	Innovations in Sustainable & Resilient Structural Materials	Progress in Innovative Mass Timber & Timber Hybrid Structural Systems
PROFESSIONAL PRACTICE 1	Successful Successions: Planning for Leadership Transitions in a Structural Engineering Firm	Lateral Analysis: Right Way/ Wrong Way with Software	Changing Structural Engineering Workforce & Work Places: Challenges & Opportunities	Technology & Our Profession — How Do We Keep Our Sanity?
BUSINESS PRACTICE	Ethics for the Practicing Engineer	For the Entrepreneurs -The Business of Consulting Structural Engineers	Politics and Public Policy for Civil Engineers	BIM: Management, Marketing, & Merit
NATURAL DISASTER	An overview of the M7.8 April 16, 2016 Ecuador Earthquake	ASCE/SEI Assessment of the Chile Earthquake of 2010	Advances in Determination of Snow & Wind Loads	Topics in Post Earthquake Response & Damage Assessment
NONBUILDING STRUCTURES	Extreme Loads on Offshore Structures 1	Extreme Loads on Offshore Structures 2	Foundations for Nonbuilding Structures	Constructability Issues for Nonbuilding Structures

FRIDAY, APRIL 7

NEW!



Innovative Executive Sessions (IES) are a fresh way for the audience to receive technical information and earn PDH credits. Opportunity for presenters to showcase their work in a very short presentation and then have time to interact directly with attendees. This provides a dynamic experience and allows the audience to receive in-depth information on the topics that interest them.

TRACK	CONCURRENT TECHNICAL SESSIONS 8:00 – 9:30 a.m.	CONCURRENT TECHNICAL SESSIONS 10:00 –11:30 a.m.	CONCURRENT TECHNICAL SESSIONS 2:00 – 3:30 p.m.	CONCURRENT TECHNICAL SESSIONS 4:00 – 5:30 p.m.
BLAST & DISPROPORTIONATE COLLAPSE	Challenges in Modeling Collapse of Reinforced Concrete Structures	Use of Numerical Techniques in the New Alternative Load Path Analysis Guidelines	Blast & Disproportionate Collapse Resistance of Pre-Cast/Pre-Stressed Concrete Construction	Recent Applications of Disproportionate Collapse Analysis to New & Existing Building Design
ASCE 7-16	ASCE 7-16 Overview What's New in the 2016 Edition	ASCE 7-16 Seismic: Learn from the Experts	ASCE 7-16 Wind: Learn from the Experts	ASCE 7-16 Tsunami: The New Resiliency Approach & Design Provisions
MASONRY/ PERFORMANCE BASE DESIGN	Masonry Design & Detailing	Masonry Inspection, Evaluation & Research	Performance-Based Design	Seismic Behavior of Steel Columns — Experimental Findings, Nonlinear Modeling & Evaluation Criteria
OPTIMIZATION & INNOVATION/ COLORADO STRUCTURES	Modern Developments in Structural Optimization	Innovative Systems & Components	Iconic Colorado Structures	Selected Colorado Contributions to Engineered Concrete Structures
BRIDGE PRACTICE	Rail Bridges	Long Span Bridges	The Federal Highway Administration — Long-Term Bridge Performance Program	Innovative Solutions using Ultra-High Performance Concrete
BRIDGE RESEARCH	Seismic — Concrete Bridges	Resilience & Sustainability	Analysis & Fatigue in Steel Bridges	Bridge Analysis & Modeling
(ES)	Natural Disasters — Wind, Waves, & Shaking	Bridge Practices	Seismic Assessment	Materals, Testing & Computational Modeling
STRUCTURES UNDER EXTREME LOADS	New Research Frontiers in Structural Resistance to Fire	Structural Fire Engineering Design Practice	Seimic Performance of Structures	Challenges in Modeling Collapse of Reinforced Concrete Structures
CASE (SEE PAGE 9)	Contractual Risk Transfers: Mastering Indemnity, Insurance the Standard of Care	Construction Administration as a Risk Management Tool	Projects with the Largest Losses & Claim Frequency	Tackling Today's Business Practice Challenges — A Structural Engineering Roundtable
CLAIMS	Resolving an Engineering/ Construction Dispute Using Litigation & Mediation	Sharing the Story of a Real Claim Defamation, Libel & Slander	The Story of a Claim Resolved by Mediation	Sharing the Story of a Real Claim The Condo
NATURAL DISASTER	Tornado Characterization, Modeling & Simulation	Tornado Loading & Building Response	Induced Seismicity Issues for Structural Engineers	Panel Discussion: New ASCE/SEI Standard for Estimation of Tornado Wind Speeds
NONBUILDING STRUCTURES & NONSTRUCTURAL COMPONENTS	Seismic Effects on Water Facilities	Storage Racks	Topics in Performance of Nonstructural Components	Seismic Response of Nonstructural Components

Visit ASCE Bookstore for a video demonstration of the new ASCE 7 Online!

SATURDAY, APRIL 8

TRACK	CONCURRENT TECHNICAL SESSIONS 8:00 – 9:30 a.m.	CONCURRENT TECHNICAL SESSIONS 10:00 – 11:30 a.m.
BLAST & DISPROPORTIONATE COLLAPSE	Updates to the ASCE Manual of Practice, Structural Design for Physical Security	Novel Techniques for Progressive Collapse Analysis
EXPANSIVE SOIL/ COLD FORMED STEEL	Expansive Soils: A Force To Be Reckoned With	Cold-Formed Steel Topics
DISPROPORTIONATE COLLAPSE/WIND	Guidelines for Alternative Load Path Analysis	Wind Engineering
STEEL	The AISC 15th Ed. Steel Construction Manual	Steel
BRIDGE PRACTICE	Reuse of Bridge Foundation: Technical Challenges & Developments	Fatigue & Fracture Assessment of Bridge Resilience & Development of Retrofit Methods
BRIDGE RESEARCH	Autonomous Condition Assessment of Transportation Infrastructure	Structural Health & Performance Monitoring of Railroad Infrastructure
EDUCATION	New Trends in Structural Engineering Education & Mentoring	Industry/Academic Capstone Model Program
FORENSICS	Forensic Investigations of Structural Damages & Failures Part 1	Forensic Investigations of Structural Damages & Failures Part 2
PROFESSIONAL PRACTICE - STORIES	Structural Engineering Business Innovations	A Few Stories to Ease the Everyday Tensions
INTERNATIONAL PROFESSIONAL PRACTICE	Gaining a Foothold in International Engineering Work	Working Internationally — Codes, Ethics, & Work Life Balance: A Young Professionals Perspective
RESILIENT & SUSTAINABLE COMMUNITIES	Building Resilient & Sustainable Communities: Engineering Advances	Bldg Resilient & Sustain- able Communities: Includ- ing Sociological Impacts in Engineering Practice

WEDNESDAY, APRIL 5 • 1:45 - 3:30 p.m.

Denver Performing Arts Complex (DPAC)

The Denver Performing Arts Complex is the second-largest performing arts complex in the U.S. This tour will introduce Congress attendees to the unique features of the space and theater, featuring presentations by local engineers from Martin/Martin about the design challenges, as well as presentations by Jody Grossman of Denver Arts & Venues/DPAC about their project, The Next Stage, which seeks to expand the Denver Performing Arts Complex as a major cultural hub for the region. The vision includes a new concert hall, residential towers, a new location for a Denver arts magnet school and an outdoor art park. Get a detailed look into how a stage comes to life and the structural engineering behind it.

Organized by the Local Planning Committee. Additional registration fee: EB \$30, ADV \$40 (light refreshment provided)



SATURDAY, APRIL 8 • 3:00 - 5:30 p.m.

Train to the Plane and the DIA Hotel and Transit Center

This tour offers conference attendees a behind-the-scenes look at Denver to airport transportation, as well as an opportunity to learn about the engineering of the rail line and the airport hotel and transit center. The tour is arranged to align with the end of the conference, so attendees can take the train to the airport. Speakers will include representatives from the Regional Transportation District (RTD) and the project team, who will describe engineering challenges constructing the train, airport hotel and transit center. The tour starts at 3:00 p.m. at Union Station and ends at 5:30 p.m. at Denver International Airport. Tour participants arrive at airport approximately 4:40 p.m. Participants can leave earlier if they need to catch a flight.

Organized by the Local Planning Committee. Additional registration fee: EB \$30, ADV \$40

STUDENTS AND YOUNG PROFESSIONALS



SATURDAY, APRIL 8 3:00 -4:30 p.m.

Denver Commuter Rail Maintenance **Facility**

This tour offers an inside look at the Commuter Rail Maintenance Facility, a facility that is typically not open to the public. This facility, completed in 2014, has six tracks with 36 vehicle spots, providing approximately 230,000 square feet of space on four levels; it has earned LEED Gold certification. There are many interesting aspects to the design, including the selection of building materials and the use of BIM. To reach this facility, the tour will begin with a ride on one of Denver's new commuter rail lines. At the Commercial Rail Maintenance Facility, attendees will be introduced to the operation of the facility and unique challenges associated with its design. The tour starts and ends at the Convention Center.

Organized by the Local Planning Committee. Additional registration fee: EB \$30, ADV \$40

SPACE IS LIMITED. REGISTER BY **MARCH 16 FOR ALL TOURS. ON-SITE REGISTRATION IS** NOT AVAILABLE FOR TOURS.

Structures Congress 2017 includes special events designed to help you make the most of your Structures Congress experience.

THURSDAY, APRIL 6 • 7:00 - 8:00 a.m.

Meet the Leaders **Breakfast**

Enjoy breakfast with leaders of the profession. This event is designed to give students and young professionals an opportunity to participate in a discussion with leaders of the Structural Engineering profession and SEI. Leaders will share their experiences throughout their careers and provide invaluable career insights. Take advantage of this special opportunity to connect.



FRIDAY, APRIL 7 • 4:30 - 6:00 p.m.

SEI Student Career Networking Event

Full-time students registered for Structures Congress are invited to this exclusive event to network one-on-one with employers for structural engineering positions and internships.

Full-time and graduating students: Visit www.asce.org/SEI-Students to view participating organizations, and apply online by MARCH 15 to take full advantage of this opportunity. Your profile, resume and contact info will be shared with participating organizations in advance of the event.



NEW!

NEW!

SEI Student Competitions

Enter the SEI Student Video Competition and the NEW SEI Student Structural Engineering Competition to showcase your talent and earn support to participate at Congress in Denver.

Details at www.asce.org/ **SEI-Students. Entry deadlines** are in DECEMBER.



SEI Young Professionals (35 and younger) Scholarship

This scholarship provides motivated young professionals in Structural Engineering the opportunity to participate and get involved in SEI at Structures Congress.

Learn more and apply by DECEMBER 1 at www.asce.org/SEI-Students. Students are not eligible.

WEDNESDAY, APRIL 5

2:00 - 5:00 p.m.

Communications and Media Training

3 PDHs

Do you aspire to be a great presenter or spokesperson for your organization? If so, come learn how to hone your skills to become a confident and expert communicator in any setting. The three-hour course will teach you:

- How to craft and deliver compelling messages that will resonate with your audience
- Tips and tricks to overcoming "stage fright"
- Techniques that will put you in charge of interviews and increase your credibility
- The power of nonverbal communication and how to make it work for you
- Foolproof techniques that will keep you on message no matter what you're asked

Following the presentation, there will be hands-on exercises to give attendees the opportunity to practice what they've learned.

Presenter: Lynn Badgley, Senior Manager, Media Relations for ASCE

Lynn has had a career in communications spanning 27 years. She has developed customized communication strategies that have helped organizations in the private, government and nonprofit sectors enhance their credibility and influence and boost their branding and visibility in order to maximize public awareness and support. A seasoned professional who has provided strategic communications counsel to senior-level management on a variety of complex issues, she is skilled in message development, crisis communications and media outreach.

Additional registration fee, Member: EB \$95/ADV \$145/ONS \$195, Nonmember: EB \$110/ADV \$160/ONS \$210

2:00 - 5:00 p.m.

Learn to Be the Most Effective Leader You Can Be

3 PDHs

This is for those who desire to expand their career opportunities into leadership positions in the engineering profession. This workshop will provide attendees with the tools and incentive to grow their leadership skills and abilities. By the end of this highly interactive workshop, each individual will be able to:

- Define leadership
- List the three questions that everyone asks of the leaders in their lives and the three questions that all effective leaders ask of their followers
- Explain the role of TRUST in every organization
- Identify what difficult conversations must happen within the workplace
- Effectively chair/lead a business meeting
- Effectively give constructive feedback and receive feedback from others
- Understand how you will develop your leadership in the future and beyond this workshop

Presenter: James J. O'Brien, Jr., P.E., M.ASCE, Managing Director of Professional and Educational Activities, ASCE

James J. O'Brien, Jr., is a 26-year commissioned officer in the U.S. Army and a West Point graduate. He is a faculty member at the U.S. Military Academy, University of Notre Dame and George Mason University and actively lives leadership every day. O'Brien is committed to his own and others' daily leadership improvement.

Additional registration fee, Member: EB \$95/ADV \$145/ONS \$195, Nonmember: EB \$110/ADV \$160/ONS \$210

1:00 - 5:00 p.m.

Climate Action for Structural Engineers

4 PDHs

Structural engineers can play a very significant, even vital, role in mitigating the effects of climate change. Awareness of the carbon footprints of structural materials, as well as the structural impact of building energy usage resulting from thermal bridging and detailing to ensure foundation and slab edge insulation, can have a large impact on the emissions of global warming potential gases from the construction and operation of buildings. Program will include:

- Rationale for action Overview of anthropogenic carbon emissions and changing climactic conditions
- Overview of mitigation and adaptation concepts and strategies
- Mitigation of emissions during building construction and operations
- Summary Opportunities and responsibilities of structural engineers and our profession

Presenter: Jim D'Aloisio, P.E., M.ASCE, Principal, Klepper, Hahn & Hyatt

Jim D'Aloisio is the Chair of the SEI Climate Action Team. He is a principal with Klepper, Hahn & Hyatt — a structural engineering, landscape architecture and building envelope services firm located in Syracuse, New York. He is a member of ÁSCE, AISC and NYSSPE. Jim has over 30 years' experience in the design, analysis and investigation of building structures. He has given over 200 presentations, including at numerous Structures Congresses, ASCE webinars and Greenbuild, and has presented daylong seminars on forensic engineering, special inspections, sustainable structural design and building energy code compliance.

Additional registration fee, Member: EB \$125/ADV \$175/ONS \$225, Nonmember: EB \$140/ADV \$190/ONS \$240





FRIDAY, APRIL 7

The Council of American Structural Engineers (CASE) is a national association of structural engineering firms that operates as a coalition of the American Council of Engineering Companies (ACEC). The CASE mission is to improve the practice of structural engineering by reducing the frequency and severity of claims. To this end, it provides a forum for action to improve the quality of structural engineering through enhancement of business practices, decreased professional liability exposure and increased profitability. The following CASE Spring Risk Convocation sessions were organized by CASE and are open to all conference registrants.



8:00 - 9:30 a.m.

Contractual Risk Transfers for Professionals: Mastering Indemnity, Insurance and the Standard of Care

Presenter: Ryan J. Kohler, Attorney at Law, Collins, Collins, Muir + Stewart, LLP

This session focuses on legal elements of claims made against design professionals. Topics discussed vary from the fundamentals of negligence, how the law applies standard of care, and how to strengthen your standard of care contract language and indemnity.

By the end of this session, attendees will:

- Learn how your contract can change your professional standard of care
- Understand how the standard of care is applied in negligence claims and lawsuits
- Define what indemnity and the duty to defend means in their contract
- Understand contractual risks transfers of indemnity and insurance

2:00 - 3:30 p.m.

Projects With the Largest Losses and Claim Frequency

Moderator: Timothy J. Corbett, SmartRisk

Presenters: Timothy J. Corbett, SmartRisk and Brian Stewart, Esq.,

Collins, Collins, Muir + Stewart, LLP

There are project types that routinely cause more trouble for design firms with a higher frequency or severity of claims than other project types. In this session, we will identify higher-risk project types, the disciplines that are impacted, root causes of claims, who files those claims, dispute resolution methods used and examples of claim situations. This session will also identify helpful practices and strategies design firms can apply for managing and mitigating risk on these higher-risk project types.

At the end of this session, the audience will be able to:

- Identify higher risk project types
- Understand the root causes of claims
- Learn who files claims
- Address dispute resolution methods

10:00 - 11:30 a.m.

Construction Administration as a Risk Management Tool

Presenter: Daniel T. Buelow, Managing Director, Architects & Engineers Division, Willis Towers Watson

This session will be an interactive case study of an actual claim. The group will review pitfalls and opportunities design firms face when it comes to construction administration — in addition to responding to a catastrophic event. Participants will review a wide range of risk management challenges, including site visits, addressing noncompliant work, scope creep, job-site safety and documentation. This case study will also include a discussion on what to do when disaster strikes and how best to respond in order to mitigate your risk.

At the end of this session, the attendees will be able to:

- Identify the sources from which duties for the design professional are created relative to job-site safety and site duties during the construction process
- Discuss the role of the site observation report in the design process
- Address the responsibilities of the designer on the jobsite relative to safety while not exposing the designer to additional liability
- Identify how to address issues raised in progress meetings on the job site when issues of safety are raised

4:00 - 5:30 p.m.

Tackling Today's Business Practice Challenges — A Structural Engineering Roundtable

Moderator: David W. Mykins, P.E., M.ASCE, President, Stroud Pence Structural Engineers

Join CASE Leaders and structural engineering executives for an interactive discussion of the business practice challenges encountered by structural engineering firms on a daily basis and the best practices employed by the industry's top firms to address those challenges. Attendees are encouraged to bring their own issues to discuss, but some of the anticipated topics include ownership/leadership transitions, firm valuation methods, preparedness of recent engineering graduates, keeping up with increasing code complexity and more.

At the end of this session, the audience will be able to:

- Develop business relationships that can lead to growth and success
- Connect creative business solutions to common problems
- Gain new perspectives on their company

DON'T MISS OUT ON EARLY BIRD RATES. REGISTER BY FEBRUARY 15.

Not a member of SEI/ASCE? Join now to save up to \$200 on your registration package and get the member rate on all SEI/ASCE conferences, publications, continuing education and more. Visit www.asce.org/SEI to join now, or call (800) 548-ASCE (2723).

EARLY-BIRD REGISTRATION DISCOUNT (EB)

Register early for the best savings. Additionally, since event spaces are limited, EB registration offers the best option to receive all eligible tickets for included events. The deadline for EB registration is Wednesday, February 15. Registration forms, including complete payment information, must be RECEIVED by this date to qualify for the EB registration discount.

ADVANCE REGISTRATION DISCOUNT (ADV)

If you miss the early deadline, there is still time to take advantage of an ADV. The deadline for Advance registration is Thursday, March 16, 2017. Registration forms, including complete payment information, must be RECEIVED by this date to qualify for the ADV registration discount.

ON-SITE REGISTRATION (ONS)

Please do not mail registration forms through the U.S. Postal Service AFTER March 9, in order to ensure your registration is processed on-site. After this date, registrations must be secured with a credit card. If you are paying by credit card, please register at www.structurescongress.org or download the PDF registration form and submit it on-site along with your full credit card payment information. To avoid long lines on-site, register online up to a day before you arrive.

CONFIRMATION OF REGISTRATION

A confirmation will be e-mailed to all EB and ADV registrants within one week of registering for the Conference. EB and ADV registrants will receive their name badges and any tickets ordered at the on-site ASCE/SEI Registration Desk during registration hours. On-site, go to the "Preregistered" desk.

If you do not receive confirmation within one week, contact ASCE/SEI Registration at (800) 548-2723, or e-mail registrations@asce.org and reference STRUCTURES CONGRESS 2017 in the subject line.

PROGRAM AND SESSION CANCELLATION

ASCE/SEI reserves the right to cancel programs and/or sessions due to low registration. In the unlikely event of a cancellation, all registrants will be notified and will receive a refund, if applicable. Programs and sessions are subject to change, and ASCE/SEI reserves the right to substitute a program, session and/or speaker of equal caliber to fulfill educational requirements.

Space is limited for certain events, including the Friday lunch. Please register early. Once we sell out, we will not be able to accommodate additional registrants.

PAYMENT

Acceptable forms of payment include:

CHECK

Payable to ASCE/STRUCTURES CONGRESS 2017. (In U.S. dollars, drawn on a U.S. bank. You must include attendee's name in the memo area of the check.)

CREDIT CARD

American Express, VISA, MasterCard, Discover and Diners Club

PURCHASE ORDER

P.O. #, company name/address or other billing address (this includes Government P.O. use)

CANCELLATIONS/REFUNDS

Cancellations must be sent in writing or via e-mail by Thursday, March 16. A refund will be issued minus a \$100 processing fee, if the cancellation notice is received by ASCE by that date. No refunds will be made for cancellations received after Thursday, March 16, 2017. Send cancellations to registrations@asce.org or fax to (703) 295-6144.

HOW TO REGISTER

REGISTER ONLINE OR BY FORM

You can register online, or you can fill out and return the registration form available on the conference website — **www.structurescongress.org**.

REGISTRATION CONTACT INFORMATION

E-MAIL

registrations@asce.org

PHONE

1-800-548-2723 (U.S.) (703) 295-6300 (International)

FAX

(703) 295-6144

MAIL

ASCE/STRUCTURES CONGRESS 2017 P.O. Box 79668 Baltimore, MD 21279-0668

Please complete one form per person. Full payment MUST accompany all registrations. Registrations will not be processed without payment or copy of purchase order.

FULL REGISTRATION	EARLY BIRD (EB) ENDS WEDNESDAY, FEBRUARY 15	ADVANCE (ADV) ENDS THURSDAY, MARCH 16	ON-SITE (ONS) STARTS FRIDAY, MARCH 17
MEMBER	\$675	\$795	\$895
NONMEMBER	\$875	\$995	\$1,095
SPEAKER MEMBER	\$575	\$695	\$795
SPEAKER NONMEMBER	\$775	\$895	\$995
MODERATOR MEMBER	\$575	\$695	\$795
MODERATOR NONMEMBER	\$775	\$895	\$995
STUDENT MEMBER (Full-time student only, valid student ID required)	\$295	\$395	\$495
STUDENT NONMEMBER (Full-time student only, valid student ID required)	\$395	\$495	\$595
DAILY REGISTRATION			
DAILY MEMBER	\$390	\$510	\$610
DAILY NONMEMBER	\$490	\$610	\$710
FLEX REGISTRATION			
FLEX	\$1,895	\$2,095	\$2,295
FINANCIAL CORPORATE SPONSOR	\$5,000	\$5,000	\$5,000

YOUR STRUCTURES

CONGRESS 2017 REGISTRATION ADMITS YOU TO THESE EVENTS!	TTHURSDAY MEET THE LEADERS BREAKFAST	THURSDAY EXHIBIT HALL LUNCH	THURSDAY WELCOME RECEPTION	FRIDAY PLENARY LUNCH	Saturday Closing Pienary Luncheon	TECHNICAL SESSIONS	REFRESHMENT BREAKS	PROCEEDINGS	ЕХНІВТ НАЦ	CONTINENTAL BREAKFAST
FULL REGISTRATION										
FULL (MBR/NONMBR/SPK/MOD)	*	✓	✓	✓	✓	✓	✓	✓	✓	✓
STUDENT (MBR/NONMBR FULL-TIME STUDENTS)	✓	✓	✓	**	✓	✓	✓	✓	✓	✓
DAILY REGISTRATION										
THURSDAY	*	\checkmark	✓			\checkmark	✓	✓	✓	\checkmark
FRIDAY				✓		✓	✓	✓	✓	✓
SATURDAY					✓	\checkmark	✓	✓	✓	✓
FLEX REGISTRATION										
FLEX		\checkmark	✓			✓	√	✓	✓	✓

Register early before we sell out.

^{*} Only registrants 35 years and younger will automatically receive tickets to these events.

** Student registrants will receive a gift card to one of three restaurants within walking distance of the Convention Center for use during the Friday Luncheon.

FLEX REGISTRATION

The Flex Registration package includes four (4) registration badges, which will be assigned to the company or organization rather than to an individual. Each badge can be shared easily among several employees, enabling partial or full-day attendance, depending on your organization's need. Full packages must be purchased and additional badges cannot be added. Name badges will have the company or organization name only, not the attendee names.

FLEX REGISTRATION PACKAGE

- Access to technical sessions for individuals wearing Flex badges
- Exhibit Hall plus a.m. and p.m. breaks for individuals wearing Flex badges
- One (1) copy of Proceedings
- Four (4) tickets Thursday Exhibit Hall Lunch
- Four (4) tickets to the Thursday Welcome Reception in Exhibit Hall

REGISTER ONLINE www.structurescongress.org

The Meet the Leaders Breakfast cannot be added to the Flex Registration Package.

BECOME A FINANCIAL CORPORATE SPONSOR

As a financial corporate sponsor, you will receive:

ONE FLEX REGISTRATION PACKAGE

- Four (4) Flex Registration badges
- Access to technical sessions for individuals wearing Flex badges
- Exhibit Hall, plus a.m. and p.m. breaks for individuals wearing Flex badges
- One (1) copy of Proceedings
- Four (4) tickets Thursday Exhibit Hall Lunch
- Four (4) tickets to the Thursday Welcome Reception in Exhibit Hall

ADDITIONAL SPONSORSHIP BENEFITS

- Four (4) tickets to the Special Evening Reception Celebrating the Future of SE hosted by CSI
- Four (4) tickets to the Saturday Closing Lunch
- Logo and link on the Structures Congress 2017 website
- Recognition in the Congress 2017 Final Program on the sponsor page
- Pre- and post-conference registrant mailing list
- One-page flyer for inclusion with Congress 2017 registration materials

Contact Sean Scully at (703) 295-6154 or sscully@asce.org for more information.

VISIT THE ASCE BOOKSTORE FOR A VIDEO DEMONSTRATION OF THE NEW ASCE 7 ONLINE

ASCE 7 Online provides digital access to two editions of ASCE 7, Minimum Design Loads for Buildings and Other Structures. New features include side-by-side display of the provisions and commentary; redlining comparison of ASCE 7-10 and 7-16; annotation tools (sharing, highlighting, and adding notes and bookmarks); supplements and errata that are incorporated in real time, with date stamps and filtering by date and much more. ASCE 7 Online is a must-have platform for structural engineers, architects and those engaged in preparing and administering local building codes. **Product launch: February 2017.**

Are You Hiring Structural Engineers?

FRIDAY, APRIL 7 • 4:30 - 6:00 p.m.



SEI Student Career Networking Event

This is the perfect opportunity to network with the best and brightest structural engineering students as they enter the job market and search for career or internship placement. Learn more and sign up to maximize your visibility with students at www.asce.org/SEI-Sustaining-Org-Membership.



LODGING

Hyatt Regency Denver 650 15th Street Denver, CO 80202 (303) 436-1234



https://denver.regency.hyatt.com/en/hotel/home.html

We have a special registration rate available for our event. We expect the hotel to sell out well in advance of the official cutoff date, so book your room now.

Reservations online: https://resweb.passkey.com/go/sei2017 **Reservation by phone:** 1-800-421-1442

Mention ASCE/SEI Congress to secure the following discounted room rate:

Single/double: \$229 + tax

Current government rate, single/double occupancy: \$178 + tax

All room rates are subject to applicable tax — currently 14.75% per room, per night, and subject to change.

The group discount will be available through March 1 or until the hotel sells out. Book early.

TRANSPORTATION

Denver International Airport

Distance from hotel: 24.6 miles

Denver Airport Rail

Travelers can now use the A Line, the new rail service from Denver International Airport to LoDo's (lower downtown) Union Station and back, courtesy of Regional Transportation District (RTD). The cost each way is \$9 per person. The Denver airport rail has six stops along the way and takes approximately 37 minutes.

Travelers Car Service

Cab service: Approximate cost is \$51 to airport from downtown and \$55 from airport to the hotel

Limo service: Approximate cost is \$60 to \$120 (one way, dependent upon company and number of passengers)

Go to the conference website at **www.structurescongress.org** for additional information about transportation and getting around Denver.

ADA COMPLIANCE

Both the hotel and convention center are fully accessible to the disabled. If you require special assistance at the Congress, please submit with your registration form a written description of your requirements or e-mail registrations@asce.org by Tuesday, March 14. While ASCE/SEI will make every effort to meet the needs of the disabled, accommodations cannot be guaranteed without prior notification.

MEETING ROOM OVERCROWDING

ASCE/SEI will make every effort to schedule popular events in rooms large enough to accommodate anticipated attendance. Because many events are extremely popular, it is wise to select alternative events as you plan your Conference schedule. ASCE/SEI and the host facilities are REQUIRED to follow local fire regulations and may ask participants in rooms filled to capacity to choose another event.

NO SMOKING POLICY

ASCE/SEI supports a No Smoking policy. Smoking is prohibited in all venues hosting ASCE events.

PROFESSIONAL DEVELOPMENT HOURS (PDHS)

Earn up to 17.5 PDHs by attending Congress sessions and seminars. PDHs are recognized units of record. Please note there are differences from state to state in continuing education requirements for professional engineering licensure. Each state licensing board has the final authority to approve course, credits, PDHs and other methods of earning credits in that state. ASCE/SEI strongly recommends that individuals regularly check with their state licensing boards for specific continuing education requirements in their jurisdictions that affect professional engineering licensure and the ability to renew licensure.

RECORDING OF SESSIONS

Video or audio recording(s) of any educational session is strictly prohibited without prior written permission from both ASCE/SEI and the session presenter(s).

PHOTO AND VIDEO RELEASE

By registering for Structures Congress 2017, I hereby release any photographs and/or video that may be taken of me by ASCE/SEI to be used for any purpose.

LIABILITY WAIVER

By registering for Structures Congress 2017, I agree and acknowledge that I am undertaking participation in ASCE/SEI events and activities at my own free and intentional act, and I am fully aware that possible physical injury might occur to me as a result of my participation. I give this acknowledgement freely and knowingly that I am, as a result, able to participate in ASCE/SEI events, and I do hereby assume responsibility for my own well-being. I also agree not to allow any other individual to participate in my place.

EXHIBITORS

THANK YOU TO OUR SPONSORS AND EXHIBITORS!

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CORPORATE







NEW!

EXHIBITORS AND SPONSORS

Participate in the exclusive Vendor Demonstrations. The Vendor Demonstrations provide a classroom in the Exhibit Hall to present new products and services to attendees. Thirty-minute sessions are available on a first-come, first-served basis. Contact Sean Scully at (703) 295-6154 or sscully@asce.org for more info.

As of October 7, 2016.

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Membership is an opportunity for
organizations to increase visibility for
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members year-round, and support SEI
to advance and serve the profession.
Learn more at www.asce.org/SEISustaining-Org-Membership.

VISIT THE EXHIBIT HALL TO LEARN ABOUT THE REPORT CARD



The ASCE 2017 Report Card for America's Infrastructure provides a comprehensive assessment of current infrastructure conditions and needs across 16 categories of infrastructure. Conducted every four years, the Report Card recommends solutions to raise the grades. Stop by the Report Card booth in the Exhibit Hall.