

Welcome to Monthly Webinar on Accelerated Bridge Construction

Caltrans' 2017 Pfeiffer Canyon Bridge Emergency Replacement

Sponsored by

*Accelerated Bridge Construction University Transportation Center
(ABC-UTC) at
Florida International University*



Website: abc-utc.fiu.edu

Email: abc@fiu.edu

April 18, 2019 – 1:00 p.m. to 2:00 p.m. Eastern



Today's Monthly Webinar



ABC Announcements

(10 minutes)

Featured Presentation

(35 minutes)

Caltrans' 2017 Pfeiffer Canyon Bridge Emergency Replacement

by

Ruth Fernandes, P.E., Acting State Bridge Engineer,
Caltrans; **Neil Weller, P.E.**, Bridge Construction Engineer,
Caltrans; and **David Galarza, P.E.**, Structures
Representative, Caltrans

Question and Answer

(15 minutes)

Please post your questions in the question box

2019

INTERNATIONAL ACCELERATED BRIDGE CONSTRUCTION CONFERENCE:

Including Automation, Service Life and Ultra High
Performance Concrete (UHPC)

December 11-13, 2019
Miami, FL

www.abc-utc.fiu.edu

FIU | Engineering
& Computing
Civil and Environmental Engineering



Exhibit at 2019 Conference Reserve Your Booth Today



To reserve your exhibit booths:
visit www.ABC-UTC.fiu.edu



TRAVEL SCHOLARSHIPS

State DOT, county engineers, and other bridge owners interested in receiving travel scholarships can apply online at:

<https://abc-utc.fiu.edu/conference/travel-scholarships/>

Required information includes (1) name and affiliation, (2) job title, (3) reason attending the Conference, and (4) whether you are planning to use ABC in the near future

Call for Award Nominations

<https://abc-utc.fiu.edu/conference/award-nominations/>

Award Categories:

- Most Influential Person Contributing to the Development and Implementation of ABC Technologies and Projects
- Best ABC Project in the following categories:
 - Lateral Slide Technology
 - Self-Propelled Modular Transporters
 - Prefabricated Bridge Elements and Systems
 - Emergency

Judges:

- Ahmad Abu-Hawash, Iowa DOT, Chair
- Romeo Garcia – FHWA
- Sam Fallaha – Florida DOT
- Bruce Johnson – Oregon DOT
- Bijan Khaleghi – Washington State DOT
- William Oliva – Wisconsin DOT

- Submit nomination online
- Submission deadline:
September 15, 2019

ABC-UTC WD Activities

Engineering First!

- Customizable lesson plans for K-5 students
- Short daily lessons for four weeks



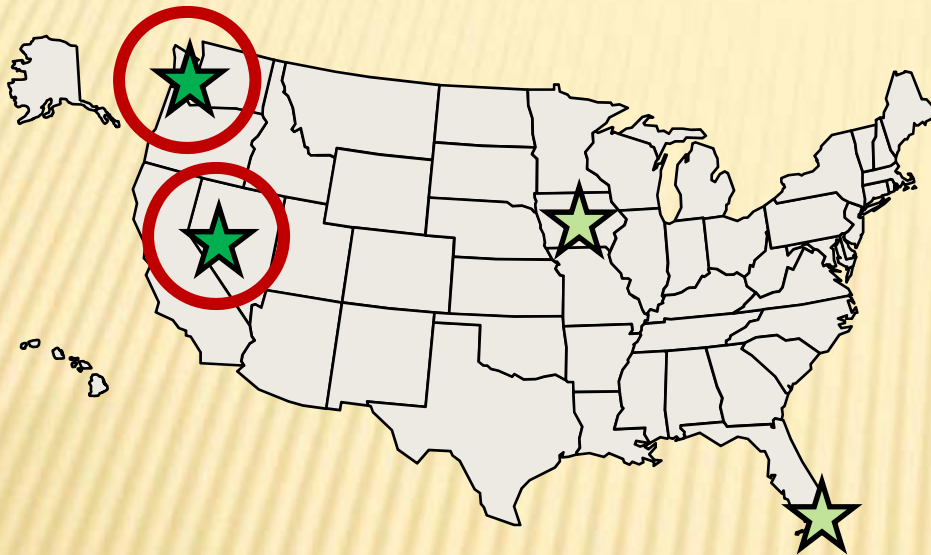
Available at:

<https://abc-utc.fiu.edu/education/engineering-first/>

ABC-UTC WD Activities

Engineering First! Teacher Workshops

Summer 2019 workshops in Reno (NV) and Seattle (WA)







Past workshop in Miami, FL (2018)
Resource developed in Ames, IA



<https://abc-utc.fiu.edu/education/activities-outreach/>

ABC-UTC WD Activities

Interested in Engineering First?



The national emphasis on STEM education will have long-lasting, positive impacts upon future generations. Unfortunately, K-5 teachers already have many demands placed upon them and the creation of new classroom modules and materials can sometimes be a daunting task. The Accelerated Bridge Construction University Transportation Center (ABC-UTC) has partnered with the West Marshall School District to develop, refine, and disseminate a customizable set of lesson plans for up to four weeks that focuses on the fundamentals of engineering and the engineering process. The module has been developed with the following performance expectations in mind:

- Ability to ask questions, make observations, and gather information to define a problem that can be solved using engineering processes.
- Ability to develop simple sketches, drawings, or physical models do help understand how function may be used to solve a given problem.
- Ability to analyze data to solve a problem including comparing the strengths and weaknesses of various alternatives.

[Download Curriculum](#)

Interest in Engineering First

Sign up here to express interest in the Engineering First curriculum. We will then contact you to see what help you may need to get the curriculum introduced in your classroom.

Name *

First Last Middle Initial

Email *

Your Position / Title *

Age of Students in Your Classroom or Center (check all that apply) *

| | |
|---|--|
| <input type="checkbox"/> < 5 yrs old (pre K) | <input type="checkbox"/> 5 to 6 yrs old (Kindergarten) |
| <input type="checkbox"/> 6 to 7 yrs old (Grade 1) | <input type="checkbox"/> 7 to 8 yrs old (Grade 2) |
| <input type="checkbox"/> 8 to 9 yrs old (Grade 3) | <input type="checkbox"/> 9 to 10 yrs old (Grade 4) |
| <input type="checkbox"/> 10 to 11 yrs old (Grade 5) | <input type="checkbox"/> > 11 yrs old |

Name of School, Library, or Center *

Address of School, Library, or Center *

Street Address

Address Line 2

City State / Province / Region Country

Postal / Zip Code

Short description of inquiry or help needed *

Submit

<https://abc-utc.fiu.edu/education/engineering-first/>

For more information, contact David Garber (dgarber@fiu.edu)

Student Spotlight



Mahsa Farzad

Graduation: Ph.D., May 2019

Institution:

Florida International University

Contact Email:

mfarz003@fiu.edu

Major Advisor:

Dr. Atorod Azizinamini

Dissertation Topic:

Retrofitting of Bridge Elements Subjected to Predominantly Axial Load Using UHPC



Student Spotlight



Jose Benjumea Royero

Graduation: Ph.D., May 2019

Institution:

University of Nevada, Reno

Contact Email:

jbenjumea@nevada.unr.edu

Major Advisor:

Dr. Saiid Saiidi

Dissertation Topic:

Experimental and Analytical Seismic Studies of a Two-Span Bridge System with Precast Concrete Elements and ABC Connections



Call for Abstracts

**Third International Bridge Seismic Workshop (III IBSW) –
Seattle, WA**

October 1-4, 2019

Organized by IABEE with co-hosts, Tongji University,
University of Washington, and Washington State DOT

<https://www.iabee.org/single-post/2019/02/12/The-Third-International-Bridge-Seismic-Workshop-III-IBSW-Oct-1-4-2019-in-Seattle-WA-USA>

Invited topics include:

Seismic Design Details for ABC

Abstract Submission Deadline: April 29, 2019

Submit to: Workshop secretary generals, Dr. Helen Xu at yanxu@tongji.edu.cn or Linda Kuo at lkuo@iabee.org

Call for Suggested Topics/Speakers

2019 ASBI 31st Annual Convention – Orlando, FL

November 4-6, 2019

Sponsored by American Segmental Bridge Institute (ASBI)

<http://www.asbi-assoc.org/>

Call for Suggested Topics / Speakers

- Submission Deadline: April 26, 2019

Obtain nomination form at:

<http://www.asbi-assoc.org/index.cfm/events/31st-annual-convention>

Email completed form to:

gfreeby@asbi-assoc.org with cc to ingrid@asbi-assoc.org

Call for Entries

2019 ASBI Bridge Award of Excellence

Sponsored by American Segmental Bridge Institute
(ASBI)

<http://www.asbi-assoc.org/>

Bridges opened to the public or dedicated
between January 1, 2017 and August 1, 2019

Submission Deadline: June 3, 2019

<https://www.asbi-assoc.org/index.cfm/events/31st-annual-convention>

For more information, contact:

Gregg Freeby at gfreeby@asbi-assoc.org

Call for Abstracts

IRF Global R2T Conference – Las Vegas, NV

November 19-22, 2019

Sponsored by International Road Federation (IRF)

<https://www.irf.global/>

Conference tracks include:

Accelerated Bridge Construction

(Note: Paper not required)

Abstract Extended Submission Deadline: May 5, 2019

<https://www.irf.global/event/grc19-lasvegas/#tab-1-2-call-for-abstracts>

Call for Papers/Extended Abstracts

TRB 1st International Conference on 3D Printing and Transportation – Washington, D.C.

November 20-21, 2019

Sponsored by Design and Construction Group,
Transportation Research Board (TRB)

<http://www.trb.org/>

Call for Papers & Extended Abstracts on 3D Printing in Transportation

Submission Deadline: May 1, 2019

<http://www.cvent.com/events/1st-international-conference-on-3d-printing-and-transportation/custom-21-2668ecc14e21461c962dc49841c84aee.aspx>

Call for Abstracts

2020 World Steel Bridge Symposium – Atlanta, GA
April 22-24, 2020

Sponsored by National Steel Bridge Alliance (NSBA)
<https://www.aisc.org/nsba>

Abstract Submission Deadline: May 21, 2019
<https://www.aisc.org/nsba/world-steel-bridge-symposium/>

For more information, contact:
Philip McConnell, mcconnell@aisc.org

Call for Award Nominations

2019 NCSEA Excellence in Structural Engineering Awards

[Eligible projects must be substantially complete between January 1, 2016 and June 30, 2019]

Sponsored by National Council of Structural Engineers Associations (NCSEA)

<http://www.ncsea.com>

Award Categories include:

- New Bridges/Transportation Structures
- Renovation/Retrofit/Rehabilitation Structures

Submission Deadline: July 16, 2019

<http://www.ncsea.com/awards/excellenceinstructuralengineeringawards/>

Upcoming Events

2019 PCI Bridge Geometry Manual and Training Webinars

Sponsored by Precast/Prestressed Concrete Institute

<https://www.pci.org/>

April 16 (2:00-3:00 pm E): Fundamentals of Roadway Geometry

April 30 (2:00-3:00 pm E): Working with Horizontal Alignments

May 14 (2:00-3:00 pm E): Geometry of Straight Bridges

May 28 (2:00-3:00 pm E): Curved Bridge Geometry

Online registration:

https://www.pci.org/PCI/Education/Continuing_Education/Webinars/PCI/Education/Webinars.aspx?hkey=af830820-c6d4-47db-bc3d-1b2c45681676

For more information, contact:

William Nickas, WNickas@pci.org

Upcoming Events

TRB Webinar: A Simplified Full-Depth Precast Concrete Deck Panel System

Tuesday, April 30, 2019 (1:00 – 2:30 p.m. Eastern)

Sponsored by Transportation Research Board (TRB)

<https://www.trb.org>

Features research from NCHRP 12-96, Final Report 895:
Simplified Full-Depth Precast Concrete Deck Panel
Systems

Online registration:

<http://www.trb.org/main/blurbs/178879.aspx>

Upcoming Events

2019 International Bridge Conference – National Harbor, MD

June 10-12, 2019

Sponsored by Engineers' Society of Western Pennsylvania

<http://www.eswp.com/bridge/>

ABC-related Workshop – Mon., June 10, 2:00-6:00 p.m.:
***W-2: New Design Standards and Worldwide Innovative
Applications Using FRP Composites to Build Bridges***

Sponsored by the American Composites Manufacturers
Association, <http://www.acmanet.org>

For more information: Contact John Busel at
jbusel@acmanet.org

ABC-UTC

Quarterly Research Seminar

Friday, April 26, 2019 – 1:00-2:00 p.m. Eastern

Integral Abutment Details for ABC Projects, Phase II

Travis Hosteng, Principal Investigator

Austin Dejong, M.S. Student

ABC-UTC / Iowa State University

Register at: <https://abc-utc.fiu.edu>

ABC-UTC

Semi-Annual Research Day

Tuesday, May 7, 2019 – 11:00 a.m.-3:30 p.m. Eastern

2019 Research Day 1



Mark Your Calendars!

ABC-UTC

2019 In-Depth Web Training

Tuesday, September 10, 2019
11:00 a.m. to 3:00 p.m. Eastern

Latest Seismic ABC Applications

Six 40-minute modules

Mark Your Calendars!

Next Monthly Webinar



Thursday, May 16, 2019 – 1:00-2:00 p.m. Eastern

Featured Presentation

Lightweight Superstructure Replacement of MDTA's Patapsco River Flats Bridge

by

William N. Pines, P.E., Director of Project Development,
Maryland Transportation Authority (MDTA);

Robert J. Healy, P.E., Director of Structures, RK&K; and

Shilpa S. Kodkani, P.E., Project Manager, RK&K

Please mark your calendars!

Today's Monthly Webinar



ABC Announcements

(10 minutes)

Featured Presentation

(35 minutes)

Caltrans' 2017 Pfeiffer Canyon Bridge Emergency Replacement

by

Ruth Fernandes, P.E., Acting State Bridge Engineer,
Caltrans; **Neil Weller, P.E.**, Bridge Construction Engineer,
Caltrans; and **David Galarza, P.E.**, Structures
Representative, Caltrans

Question and Answer

(15 minutes)

Please post your questions in the question box