

Welcome to Monthly Webinar on Accelerated Bridge Construction

Innovative Contracting Project to Accelerate Replacement of Multi-County Bridges in Iowa

Sponsored by

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



Website: abc-utc.fiu.edu

Email: abc@fiu.edu

September 17, 2020 – 1:00 p.m. to 2:00 p.m. Eastern



Today's Monthly Webinar



ABC Announcements

(10 minutes)

Featured Presentation

(35 minutes)

Innovative Contracting Project to Accelerate Replacement of Multi-County Bridges in Iowa

by

Ahmad Abu-Hawash, P.E., Chief Structural Engineer, Iowa DOT;
Phil Rossbach, P.E., Vice President, HDR Engineering, Inc.; and
Brian P. Moore, P.E., Secondary Roads Research Engineer, Iowa
County Engineers Association Service Bureau

Question and Answer

(15 minutes)

Please post your questions in the question box

**We are continuing
our plans for
having our Next
ABC Conference**

December 8 – 10, 2021

Miami, Florida

Poll Question 1 of 2

1. What is your preference for the format of the next ABC-UTC Conference to be held in December 2021?

- In person conference
- Online conference
- I am fine with either option

Poll Question 2 of 2

2. How would you rate the impact of ABC-UTC activities on bridge engineering practice in the U.S.?

- Extremely impactful
- Very impactful
- Moderate impact
- No impact

Virtual Symposium on ABCs of ABC

**Friday, December 4, 2020
9:30 a.m. – 6:15 p.m. EST**

The ABC-UTC has developed a 1-day ABCs of ABC symposium, providing the latest and essential information related to ABC.

The symposium will include presentations on safety/mobility, the AASHTO ABC Guide Specifications, decision making, project delivery, bridge bundling, public outreach, optimized risk, heavy-lift equipment, latest research ready for implementation, UHPC applications, seismic details, & case studies.

We are developing a waiting list for topics and interest in future virtual and in-person symposiums. Send an email if you are interested to: aazizina@fiu.edu

Virtual Symposium on ABCs of ABC

Friday, December 4, 2020

9:30 a.m. – 6:15 p.m. EST

Times	Topics	Speakers
9:30 a.m.	Welcome and Perspectives on ABC	Atorod Azizinamini, ABC-UTC Romeo Garcia, FHWA Carmen Swanwick, AASHTO COBS Cheryl Hersh Simmons, AASHTO T-4
9:45 a.m.	ABC and Safety / Mobility	Romeo Garcia, FHWA
10:00 a.m.	Defining ABC	Mary Lou Ralls Newman, ABC-UTC
10:30 a.m.	AASHTO LRFD Guide Specifications for ABC	Mike Culmo, CHA Consulting, Inc.
11:00 a.m.	Decision Making: ABC vs Conventional	Tim Fields, Connecticut DOT
11:30 a.m.	ABC Project Delivery	Kristin Higgins, Vermont AOT
12:00 p.m.	<i>Lunch Break</i>	

Times	Topics	Speakers
1:00 p.m.	Case Studies on ABC Bridge Bundling	Ahmad Abu-Hawash, Iowa DOT
1:30 p.m.	Public Outreach on ABC Projects	Eliza Partington, WGI
2:00 p.m.	Optimized Risk in ABC Projects	Matt Paggioli, Webber LLC Sam Piland, Webber LLC
2 :30 p.m.	<i>Break</i>	
3:00 p.m.	Use of Heavy-Lift Equipment for ABC Projects	John Engberg, Barnhart Crane & Rigging Bob Gunter, Barnhart Crane & Rigging
3:30 p.m.	Latest ABC Research Products Ready for Implementation	Atorod Azizinamini, ABC-UTC
4:00 p.m.	Ultra-High-Performance Concrete (UHPC)	Benjamin Graybeal, FHWA
4:30 p.m.	ABC Solutions and Applications in Seismic Regions	Bijan Khaleghi, Washington State DOT
5:00 p.m.	Case Studies on 2 Weekend Closures for Bridge Replacements	Bala Sivakumar, T.Y. Lin International
6:00 p.m.	Concluding Remarks	Atorod Azizinamini, ABC-UTC
6:15 p.m.	<i>Adjourn</i>	

Available Now!

Workshop on Contractor / Owner Collaboration on ABC Programs

ABC-UTC has organized a half-day regional workshop for contractor/owner collaboration on reasons and purpose surrounding the paradigm shift in State decision-making for implementing ABC as common practice in bridge project delivery and to assist contractors and suppliers in partnering in this effort.

If you would like to have a workshop in your region, please send an email to: aazizina@fiu.edu

Coming Soon!

Training Workshop on Non-Proprietary UHPC

ABC-UTC, in conjunction with other entities that have developed Non-proprietary UHPC, is organizing a workshop to provide ready-mix plants, contractors, and other interested stakeholders with essential information for producing UHPC that is not proprietary.

If you would like to have a workshop in your region, or State DOT, please send an email to:

aazizina@fiu.edu

Upcoming Events

Featured Infrastructure Speaker at CAMX 2020

Date: Wednesday, September 23, 2020

Time: 1:35 pm – 2:20 pm EASTERN

NOTE: This featured speaker session will be followed by featured panel on infrastructure from 2:25 pm – 3:40 pm EASTERN

Title: *Game Changing Infrastructure*

Challenges: New Solutions & Opportunities

**Speaker: Tim Lattner, PE – Director of Design
Florida Department of Transportation**

Description: Expectations for infrastructure service life and asset maintenance strategies have changed significantly since the Interstate Act was signed into law in 1956. The resulting expressways eliminated at-grade crossings, substantially increasing the nation's bridge inventory. Originally no target service life expectations were specifically set, but by the 1970's observations from fatigue damage failures forced engineers to consider the number of heavy truck wheel load cycles – selecting 50 years as design life. In the late 1990's with the recognition of a growing inventory maintenance challenge, AASHTO set the minimum design life to 75 years. Most recently the AASHTO Committee on Bridges and Structures approved publication of a new Guide Specification for 2020 that assigns three target service-life limits (75-, 100-, and 150-years). In recent years, Florida DOT interest in innovation and application of materials like FRP composites has led to many successful installations with the objective of building better with better materials. **This presentation will provide an overview of FDOT research and implementation using FRP composites and attendees will learn about FDOT vision for the future for transportation infrastructure.**



Featured Infrastructure Panel at CAMX 2020

Date: Wednesday, September 23, 2020

Time: 2:25 pm – 3:40 pm EASTERN

NOTE: This featured panel follows the infrastructure featured speaker – Tim Lattner that goes from 1:35 pm – 2:20 pm EASTERN

Title: Building Bridges Along the Atlantic

Description: Recent bridge design and construction projects will be highlighted, showing the willingness of transportation agencies along the east coast of North America to embrace the use of FRP for more than just rehabilitation and strengthening. With a focus on improved Life Cycle Cost and reduced maintenance liability, this panel will discuss the needs of the infrastructure community to integrate Composites reliably and economically into their business practices, particularly for concrete structures.



Moderator: Antonio Nanni, PhD., P.E., Inaugural Senior Scholar, Professor and Chair, Dept. of Civil, Arch. & Environ. Engineering University of Miami

Panelists:

➤ Engineer/Owner –

- **Darrell Evans, P.Eng. A/Assistant** Director, Prince Edward Island Department of Transportation, Infrastructure & Energy

➤ Engineer/Owner –

- **Wayne Frankhauser Jr., PE,** Bridge Program Manager, Maine Department of Transportation

➤ Engineer/Owner –

- **Steven Nolan, P.E.,** Senior Structures Design Engineer, State Structures Design Office, Florida DOT

➤ Construction Materials Specialist/Engineer –

- **Chase C. Knight, Ph.D., P.E.,** Corrosion & Composite Materials Engineer, FDOT - State Materials Office

➤ Construction Contractor –

- **Steve McNamara,** President, ANZAC CONTRACTORS, INC.

Register at: www.thecamx.org

Upcoming Events

NSBA September-October 2020 Steel Day Virtual Events

Sponsored by National Steel Bridge Alliance (NSBA)

<http://www.aisc.org/nsba>

Virtual bridge-related Steel Day events (free):

- September 23: Virtual Tennessee Bridge Tour
- September 23: Virtual Tour of the Cuyahoga River Bridges in Cleveland
- September 25: Steel Bridge Showcase of Bridges in West Region
- September 28: NSBA Trivia - East Region (Prizes for the winners)
- October 1: NSBA Trivia - West Region (Prizes for the winners)
- October 13: Structural Engineers Association of Iowa Presentation

For more information and to register: www.aisc.org/steelday

Upcoming Events

Virtual 2020 International Bridge Conference

October 19-23, 2020

Sponsored by Engineers' Society of Western PA (ESWP)

<https://eswp.com/bridge/>

ABC 1 Session

Tuesday, October 20, 2020

9:00 a.m. – 12:00 p.m. Eastern

ABC 2 Session

Wednesday, October 21, 2020

9:30 a.m. – 12:00 p.m. Eastern

Upcoming Events

ASBI 2020 Virtual Convention Event

Focus on Technology and Innovation

October 27-28, 2020

1:00 p.m. to 4:30 p.m. EDT each day

Check the ASBI website for details on this event:

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



Webinars

Monthly Webinar

**Monthly Webinar
Archives**

Symposiums

Symposiums Archives

In-Depth Web Training

In-Depth Web Training
Archives

Research Seminar

Research Seminar
Archives

Research Day

Research Day Archives

Monthly Webinar Archives

The ABC Center at FIU has offered free monthly webinars since March 2011. The ABC-UTC is continuing this series and maintaining an archive of the past events. The intended audience of these webinars includes engineers and other bridge professionals with content ranging from design issues to construction and contracting.

For listing of monthly webinars to date, [click here](#).

August 20, 2020

[Lake Pontchartrain Causeway Bridge & Safety Bay Construction, Past & Present](#)

July 23, 2020

[Deck Replacement of Vermont's I-89 Bridges with Weekend Closures](#)

June 18, 2020

[Design and Construction of High-Capacity Micropiles in ABC Projects](#)



Lake Pontchartrain Causeway Bridge & Safety Bay Construction, Past & Present

August 20, 2020

Monthly Webinar Archives

<https://abc-utc.fiu.edu/webinars/webinar-archives/>

Carlton Dufrechou, ACIP, General Manager, Lake Pontchartrain Causeway Bridge; **Hossein Ghara, P.E.**, Senior Bridge Design Manager, Volkert, Inc.; **G.J. Schexnayder, P.E.**, Group Manager – Heavy Construction, Boh Bros.; and Q&A panel members **Christopher White, P.E.**, Texas Bridge Leader, Volkert, Inc.; and **Jacob Parker, P.E.**, Project Manager, Volkert, Inc.

Lake Pontchartrain Causeway Bridge & Safety Bay Construction,
Past & Present 

Webinar Documents:

[Lake Pontchartrain Causeway Bridge & Safety Bay Construction, Past & Present](#) - pdf of presentation

Slide 2: [Video Clip - Travel on 1st Lake Pontchartrain Bridge in 1959](#)

Slide 29: [Animation – Proposal for Safety Bay Improvements](#) (*courtesy of Volkert, Inc.*)

Additional Videos:

Animation - [Safety Bay Concept](#) (*courtesy of Greater New Orleans Expressway Commission, GNOEC*)

Video - [Safety Bay Construction Drone Footage, August 2019](#) (*courtesy of GNOEC*)

[Q&A Session](#) – pdf



Webinars

Monthly Webinar

Monthly Webinar
Archives

Symposiums

Symposiums Archives

In-Depth Web Training

**In-Depth Web Training
Archives**

Research Seminar

Research Seminar
Archives

Research Day

Research Day Archives

In-Depth Web Training Archives

Building upon the series of 35-minute featured presentations in the monthly webinars hosted by the ABC-UTC, a program of annual in-depth web training was initiated in 2014 to provide more detailed coverage of select projects and topics related to ABC. Each training is four hours in length and consists of six modules, each a 30-minute presentation by an expert in the focus area of the module followed by a 10-minute Q&A session. Below are the archives of the in-depth web training presented to date.

September 8, 2020

[Design and Construction of Common ABC Technologies Using the 2018 AASHTO LRFD Guide Specifications for ABC](#)

September 10, 2019

[Latest Seismic ABC Applications](#)

September 25, 2018

[VTrans' Programmatic Implementation of ABC](#)



Design and Construction of Common ABC Technologies Using the 2018 AASHTO LRFD Guide Specifications for ABC

September 8, 2020

Michael P. Culmo, PE.
Chief Bridge Engineer
CHA Consulting, Inc.
Office: 860-290-4100
Email:
MCulmo@chacompanies.com

Mike is a Bridge Engineer with over 36 years of experience in the design of steel, concrete, prestressed concrete and timber bridges. He has special expertise in the field of accelerated bridge construction technologies and constructability engineering. Mike is the principal author of numerous publications in the field of ABC, including the *2018 AASHTO LRFD Guide Specifications for Accelerated Bridge Construction*. He is a licensed professional engineer.

Reference Documents:

- 01 - [Agenda](#)
- 02 - [Presentation Handout \(2 slides/page\)](#)
- 03 - [FHWA Design Example: 2-Span Steel Girder Including Deck](#)
- 04 - [FHWA Design Example: 2-Span Prestressed Concrete Girder](#)
- 05 - [NCHRP 12-98: Tolerance Guide](#)
- 06 - [NCHRP 12-98: Bridge System Dynamic Guide](#)
- 07 - [PCI State-of-the-Art Report on Full-Depth Precast Concrete Bridge Deck Panels](#)
- 08 - [PCI NE Recommended Guide Details for FDDP](#)
- 09 - [PCI NE NEXT Beam Details](#)
- 10 - [PCI NE Recommended Guide Details for Substructures](#)
- 11 - [PCI NE Camber and Profile Management Guide](#)
- 12 - [PCI NE Guidelines for Resolution of Non-Conformances in Precast Concrete Bridge Elements](#)

In-Depth Web Training Archives

<https://abc-utc.fiu.edu/webinars/in-depth-web-training-archive/>

ABC-UTC

Quarterly Research Seminar

Friday, October 30, 2020 – 1:00-2:00 p.m. Eastern

ABC and Safety: Work Zone Safety Analysis, Investigating Benefits from ABC on Roadway Safety

by

Mohammed Hadi, Ph.D., P.E., Professor and Advisor;
and **Sajad Mokhtarimousavi, Ph.D.** Student
ABC-UTC / Florida International University

Registration to open soon at: www.abc-utc.fiu.edu

ABC-UTC

Semi-Annual Research Day

Friday, November 6, 2020 – 10:00 a.m.-5:00 p.m. EST

2020 Research Day 2



Register online at: www.abc-utc.fiu.edu

Next Monthly Webinar



Thursday, October 22, 2020 – 1:00-2:00 p.m. EDT

Featured Presentation

2019 Emergency Partial Reconstruction of Nebraska BNSF Bridge 0.95

by

Jose Mares, P.E., Director of Bridge Engineering, BNSF Railway; **Temple Overman, P.E.**, Bridge Project Engineer, HNTB Corporation; and **Tyler Schulke**, Deputy Project Manager, Ames Construction

Mark your Calendars!

Today's Monthly Webinar



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