

# Welcome to Monthly Webinar on Accelerated Bridge Construction

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

Sponsored by

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



Website: [abc-utc.fiu.edu](http://abc-utc.fiu.edu)

Email: [abc@fiu.edu](mailto:abc@fiu.edu)

August 20, 2020 – 1:00 p.m. to 2:00 p.m. Eastern



# Today's Monthly Webinar



**ABC Announcements**

(10 minutes)

**Featured Presentation**

(35 minutes)

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

by

**Carlton Dufrechou, ACIP**, General Manager, Lake Pontchartrain Causeway Bridge; **Hossein Ghara, P.E.**, Senior Bridge Design Manager, Volkert, Inc.; and **G.J. Schexnayder, P.E.**, Group Manager – Heavy Construction, Boh Bros.

**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**

# 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](mailto: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 Sam Piland, Webber
2 :30 p.m.	<i>Break</i>	
3:00 p.m.	Use of Heavy-Lift Equipment for ABC Projects	Heavy Lift Contractor
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](mailto: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](mailto:aazizina@fiu.edu)**



# Upcoming Events

- **CAMX 2020 is virtual!**
  - Free sessions, Tutorials, Technical Papers, Educational Sessions, Keynotes, and exhibit hall
  - Starting in August, continues in September
- **More in technical program and registration – [www.thecamx.org](http://www.thecamx.org)**



**John Busel**  
Vice President, Composites Growth Initiative at American Composites Manufacturers Association (ACMA)

August 26, 2020  
10:00 AM PT/1:00 PM ET

## COMPOSITES 201

This session builds on the information presented in Composites 101 with more focus on fiber reinforcements, polymers, and comparisons of materials to provide a greater understanding of FRP composite materials and properties and performance. An in-depth overview of common manufacturing processes including the process and product characteristics will be covered, as well as fundamental criteria for designing with composites, highlighting and comparing the benefits and advantages of common materials. Learn more and register:

<https://www.thecamx.org/camx-webinar-series/>

# 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](http://www.thecamx.org)

# Upcoming Events

## **SSSBA Steel Bridge Education Lectures: From Concept to Delivery**

Free Student Educational Program

6-Part Special Series

Instructor: Michael Barker, Ph.D., P.E., University of Wyoming

Sponsored by the Short Span Steel Bridge Alliance (SSSBA)

<https://www.shortspansteelbridges.org/>, in collaboration with University of Wyoming, American Institute of Steel Construction, and National Steel Bridge Alliance

**September 8-24, 2020**

**Every Tuesday & Thursday (7:00-8:00 p.m. Eastern)**

For more information:

<https://mailchi.mp/steel/student-lectures-2020>

# 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/>

# Upcoming Events

## **Virtual 2021 TRB Annual Meeting**

Sponsored by Transportation Research Board (TRB)

<http://www.trb.org>

Committee Meetings: **January 5–8** and **January 11–15**

Sessions: **January 21–22** and **January 25–29**

Exhibits: **January 21–22** and **January 25–29**

For more information:

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



Webinars

Monthly Webinar

**Monthly Webinar  
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](#).

**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](#)**

**May 21, 2020**

**[Lateral Slide and UHPC Integral Abutment Connections on Iowa's 2019 Camp Creek Bridge Replacement](#)**



# Deck Replacement of Vermont's I-89 Bridges with Weekend Closures

July 23, 2020

**Kristin Higgins, P.E.**, State Bridge Engineer and Structures Program Manager, Vermont Agency of Transportation; **Eddie He, P.E.**, Technical Director, AccelBridge; **John Whittaker**, Project Manager, Kubricky Construction Corp.; and Q&A Panel members **Todd Sumner, P.E.**, Project Manager, VTrans; **Scott Burbank, P.E.**, Director of Structures, VHB; **Ryan Barnes, P.E.**, Senior Structural Engineer, VHB; **John Gonyea**, Chief Estimator, Fort Miller Co., Inc.

## Deck Replacement of Vermont's I-89 Bridges with Weekend Closures



### Webinar Documents:

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

Slide 14: [Video Clip of Vermont's I-89 Bridge Panel Erection](#) (*courtesy of AccelBridge*)

Slide 39: [Time-Lapse Video of Vermont's I-89 Bridge 76S Construction](#) (*courtesy of VTrans*)

Slide 42: [Animation of AccelBridge Panel Erection](#) (*courtesy of AccelBridge*)

[Q&A Session](#) - pdf

[News - July 23, 2020](#) - pdf of presentation



# ABC-UTC 2020 In-Depth Web Training

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

Tuesday, September 8, 11:00 a.m. to 3:00 p.m. EDT

**Organizer & Presenter:**

**Michael P. Culmo, P.E., CHA Consulting, Inc.**

1	11:00 a.m. E	Precast Concrete Full-Depth Deck Panels
2	11:40 a.m. E	Adjacent Modular Decked Beams
3	12:20 p.m. E	Prefabricated Substructures
4	1:00 p.m. E	Bridge Systems with Self-Propelled Modular Transporters (SPMTs)
5	1:40 p.m. E	Bridge Systems with Lateral Slides
6	2:20 p.m. E	Construction Specifications

# Next Monthly Webinar



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

## Featured Presentation

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

by

**Ahmad Abu-Hawash, P.E.**, Chief Structural Engineer, Iowa Department of Transportation; **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

**Mark your Calendars!**

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**Featured Presentation:**

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**Carlton Dufrechou, ACIP**, General Manager, Lake Pontchartrain Causeway Bridge; **Hossein Ghara, P.E.**, Senior Bridge Design Manager, Volkert, Inc.; and **G.J. Schexnayder, P.E.**, Group Manager – Heavy Construction, Boh Bros.

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