

**Welcome to Monthly Webinar on  
Accelerated Bridge Construction**

**ABC of Detroit's Network Tied Arch  
Using SPMTs**

**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)**

**May 18, 2023 – 1:00 p.m. to 2:15 p.m. Eastern**



# Today's Monthly Webinar



**ABC Announcements**

(10 minutes)

**Featured Presentation**

(35-40 minutes)

## **ABC of Detroit's Network Tied Arch Using SPMTs**

by

**Mike LaViolette, P.E., P.Eng.**, National Bridge Practice Leader, HDR;  
**Matt Longfield, P.E., S.E.**, Michigan Bridge Section Leader, HDR; and  
**John Belcher, P.E.**, Bridge Construction Engineer, Michigan Department of  
Transportation

**Question and Answer Session**

(15+ minutes)

**Please post your questions in the question box**

# Innovative Bridge Technologies / Accelerated Bridge Construction University Transportation Center (IBT/ABC-UTC)

## USDOT Tier 1 UTC – Awarded 2023-2029

### Research Priority:

Improving the Durability and Extending the Life of Transportation Infrastructure

**Lead:** Florida International University

### Consortia Members:

Florida A&M University

Texas A&M University

University of Georgia

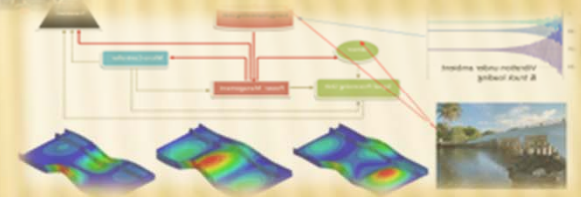
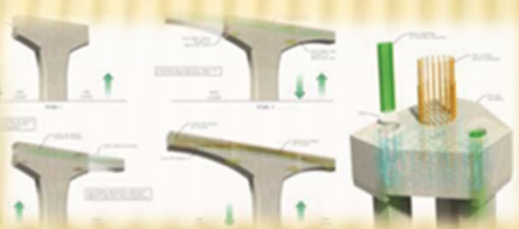
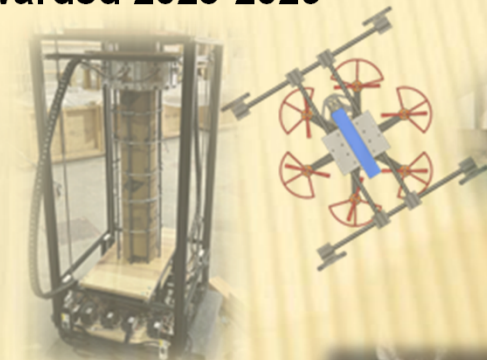
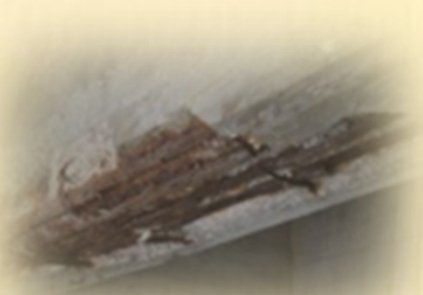
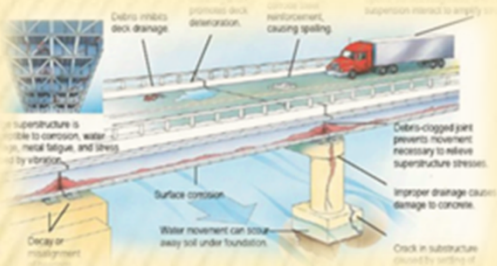
University of Nevada, Reno

University of Oklahoma

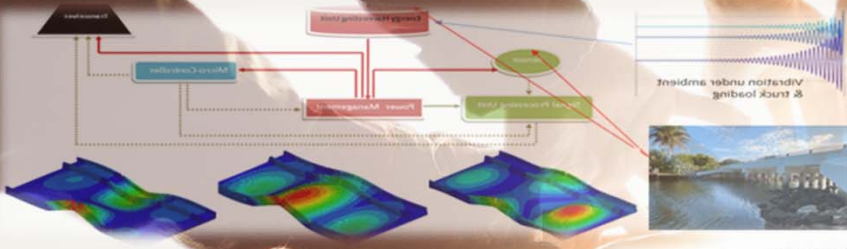
University of Washington



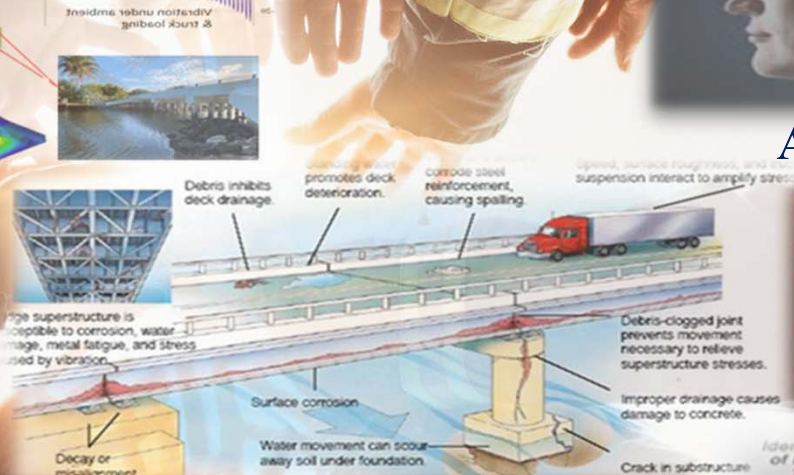
# Innovative Bridge Technologies / Accelerated Bridge Construction University Transportation Center (IBT/ABC-UTC) – Awarded 2023-2029



# Next Generation of Asset Management System



**Digital Twin**



**National Service Life System**

**Artificial Intelligence**



**Next Generation of ABC**

**Automation- 3D Printing**

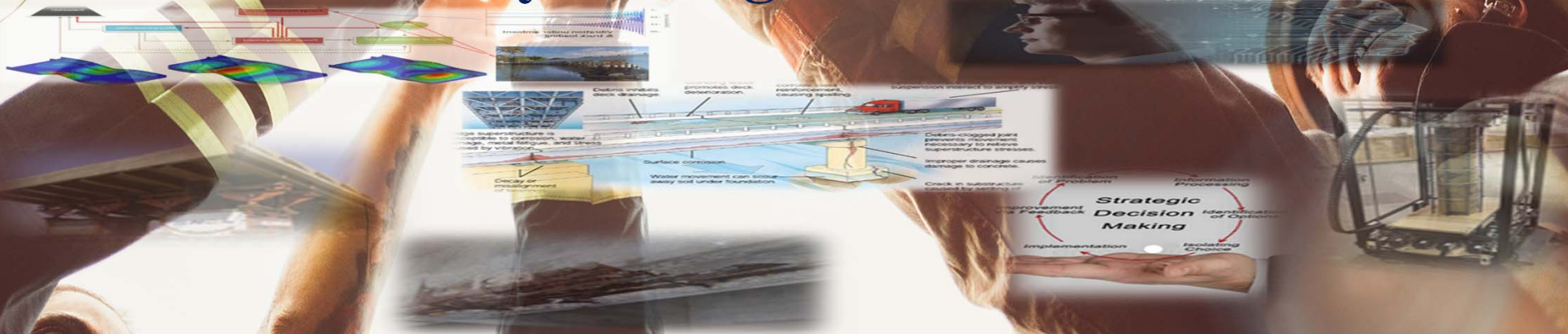
**Decision Making Tools that include Social Equity, Climate Change**

**Advanced Materials for Repair and Upgrade**



**If you are interested in being a member of the Research Advisory Panel (RAP) for this project, please send me an email at [aazizina@fiu.edu](mailto:aazizina@fiu.edu).**

**The qualification for being a member of the RAP for this project is that you should have significant responsibility in asset management systems at your organization.**



# Call for Award Nominations

## **2023 NCSEA Structural Engineering Excellence (SEE) Awards**

*[Projects must have been completed between January 1, 2020 and May 31, 2023]*

Sponsored by National Council of Structural Engineers Associations (NCSEA)

<http://www.ncsea.com>

### **Award Categories include:**

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

**Submission Deadline:** June 5, 2023

<https://www.weseeaboveandbeyond.com/see-awards>

# Upcoming Events

## **ASBI Monthly Webinars for 2023:**

**Electronically Isolated Tendon Pilot Project - SH146 in Kemah, Texas**

Wednesday, May 31

**Opportunities for Launching Gantries and Precast Segmental Construction**

Wednesday, June 28

1:00 - 2:00 p.m. ET for All Webinars

PDH Certificates Will be Issued to Attendees

## **2023 ASBI Seminar on Construction Practices for Segmental Concrete Bridges**

Thursday - Friday, August 17 - 18

Hotel Fontenot, New Orleans, LA

## **2023 ASBI 35<sup>th</sup> Annual Convention and Committee Meetings**

November 6-8 with Committee Meetings on November 5

Westin La Paloma Resort and Spa, Tucson, AZ

For more information: <https://www.asbi-assoc.org>



# Upcoming Events

## **PTI Certification**

Level 1 and Level 2 Multistrand and Grouted Post-Tensioning Specialist Certification Training

**June 7-9, 2023**

Embassy Suites by Hilton Miami International Airport

**September 13-15, 2023**

Embassy Suites by Hilton Scottsdale Resort

**November 15-17, 2023**

Austin, Texas. Hotel Information coming soon.

For more information: <https://www.post-tensioning.org/certification/fieldpersonnelcertification/2023certificationweeks.aspx>

# Upcoming Events

## **PCI Design Awards**

Nominations will close Wednesday, July 26, 2023

\$500 submission fee per project submitted

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

## **PCI Committee Days Conference**

October 4 – October 8, 2023

JW Marriott

Tampa, Florida

For more information: [https://www.pci.org/PCI/News-Events/PCI\\_Events.aspx](https://www.pci.org/PCI/News-Events/PCI_Events.aspx)

# International Bridge Conference

- Conference info link:
- <https://eswp.com/bridge/program/>



## W11: Design of Fiber-Reinforced Polymer (FRP) Composites Bridges

Wednesday, June 14, 2023; 1:30– 5:00 pm

*The objectives of this workshop are to familiarize attendees with the background and code provisions related to design of fiber -reinforced polymer (FRP) composites bridges and to provide cutting edge material and product advancements to design and specify FRP composites products that can assist attendees when building new composites bridges for Accelerated Bridge Construction (ABC) applications.*

# Upcoming Events

**2023 CAMX – The Composites and Advanced Materials Expo – Atlanta, GA**

October 30 – November 2, 2023

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

Sponsored by American Composites Manufacturers Association (ACMA) & Society for the Advancement of Material and Process Engineering (SAMPE)

<http://www.acmanet.org> & <http://www.sampe.org/>

For more information, contact John Busel:

[jbusel@acmanet.org](mailto:jbusel@acmanet.org)

# Quarterly Research Seminar

Friday, July 28, 2023 – 1:00-2:15 p.m. Eastern  
(Certificate of Attendance provided)

Featured Project:

## Design Guidance for UHPC Connections of Precast Girders Made Continuous for Live Load

by

Royce W. Floyd, P.E., S.E., Ph.D., Principal Investigator; and Zachary  
Tiry, M.S. Student, **ABC-UTC / University of Oklahoma**

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

# Next Monthly Webinar

Thursday, June 29, 2023 – 1:00-2:15 p.m. Eastern

**(Certificate of Attendance provided)**

**Featured Presentation:**

## ***FHWA's Lightweight Concrete Bridge Design Primer – ABC Applications***

by

**Reid W. Castrodale, Ph.D., P.E.,**  
Castrodale Engineering Consultants, PC

**Mark your Calendars!**

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