National Steel Bridge Alliance Update – June 2019 AASHTO T-14
Brandon Chavel, PhD, PE – NSBA Director of Market Development
Who We Are
The NSBA Team
Upcoming Events

World Steel Bridge Symposium (WSBS)
AASHTO/NSBA Steel Bridge Collaboration Meeting
NASCC: THE STEEL CONFERENCE

ATLANTA
Georgia World Congress Center
April 22–24, 2020

incorporating the
World Steel Bridge Symposium
and the
SSRC Annual Stability Conference

www.aisc.org/nascc
World Steel Bridge Symposium

Steel Bridge Design Workshop at WSBS

– April 21, 2019 - afternoon

– Agenda
  – Conceptual Layout and Framing
  – Loads
  – The Basics of Steel Design
  – Bolting and Splices
  – Detailing and Fabrication
  – Bridge Welding
  – Modern Corrosion Protection Systems

– More information coming soon!
AASHTO/NSBA Steel Bridge Collaboration

October 22-24, 2019

- Savannah, GA
- Holiday Inn Historic Savannah
- More information coming soon!
Publicity For Your Projects

Modern Steel Construction & Prize Bridge Awards
entries close on SteelDay
September 27, 2019

2018 Prize Bridge National Award
Sellwood Bridge
Portland, Ore.
Photo: Tom Paiva

2020 PRIZE BRIDGE AWARDS
Recognizing the innovative use of structural steel in the bridges that connect America’s communities.

aisc.org/prizebridge
Publicity For Your Projects

Modern Steel Construction

- Have an idea for a great bridge article?
- Submit it to: www.aisc.org/bridgeideas
Current Initiatives

New Construction Market Pricing Study
Streamlined Steel Girder Bridge Design
New Construction Market Pricing Study

Study – In Progress

– Investigate the in-place cost of structural steel versus precast and cast-in-place concrete in the bridge market on a national, regional, and state basis.
  – Structural steel and concrete bridges
  – New and replacement structures
  – Projects constructed after 2013
– Selected 12 total states, 3 from each region
New Construction Market Pricing Study

Study – In Progress

- Collecting design plans and bid tab information
- Develop costs per Sq. Ft of Bridge Deck
- Consider: Short (L<140’), Medium (140’<L<250’), and Long Span (L>250’)
- Breakdown by Work Categories
  - Structure Excavation
  - Foundations
  - Substructure
  - Beams
  - Superstructure
Streamlined Steel Girder Bridge Design

Design Guideline – in Progress

- Streamlined design guide for straight, low skew, steel girder bridges (“routine”).
- Implement AASHTO LRFD BDS with greater efficiency and quality.
- Annotated Guideline explaining why given provisions of the AASHTO LRFD BDS are relevant for non-relevant for this design set.
- Previously identified as a top research need by TRB AFF20 & T-14.

- Logistics:
  - Domenic Coletti (HDR)
  - Mike Grubb (M.A. Grubb & Associates)
  - 9th Edition AASHTO LRFD Specification compliant
  - Work to be completed in 10/2020
AISC Student Steel Bridge Competition
2019 National Finals
AISC Student Steel Bridge Competition

- 162 Schools in 17 Regional Events
- 41 Schools at the National Finals
AISC Student Steel Bridge Competition

– Overall Winners
  – 1<sup>st</sup> – Lafayette College
  – 2<sup>nd</sup> – University of Florida
  – 3<sup>rd</sup> – Youngstown State University
  – https://www.youtube.com/watch?v=Yw9YXrsGNGs
Bridges to Prosperity

Bolivia – La Marca Suspension Bridge
Bolivia Bridge Team Volunteers

- John Hastings (NSBA)
- Scott Walls (Delaware)
- Craig Stevens (Delaware)
- Jackie Wong (California)
- Curt Duncan (Tennessee)
- Brad Dillman (High Steel)
- Larry O’Connell (Stupp Bridge)
- David Alameda (Fought & Company Inc.)
- Craig Smart (HDR)
- Anthony Schoenecker (Modjeski & Masters)
Bridge Building

- Tower Lift
- 360’ Long
- Completed Bridge