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Emergency Barge Structures
Assessment, Preparation, and Installation

FEATURE:

Emergency Barge Structures; Assessment, Preparation, and Installation

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MAY 2021
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The Louisiana Section of the American Society of Civil Engineers was founded in 1914 and has since been in continuous operation. The Section consists of the entire state of Louisiana and is divided into four branches that directly serve over 2000 members. They are the Acadiana Branch centered in Lafayette, the Baton Rouge Branch, the New Orleans Branch, and the Shreveport Branch.

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The Louisiana Section is located in ASCE Region 5 that consists of the Louisiana, Mississippi, Alabama, Georgia, Florida Sections, and Puerto Rico.

President's Message

By Joe "Butch" Ford Jr., PE

Joe "Butch" Ford Jr., PE

Spring is everywhere in Louisiana and as we approach the midway point in our current ASCE calendar year we have many activities planned.

The LSU Student Chapter is hosting the 2021 Deep South Conference April 14th thru the 17th and for the first time it will be by Zoom. The program will include the following:

Business Meeting
Concrete Canoe Presentations
Sustainable Solutions Presentations
Surveying Presentations
Social Event
Meade paper Presentation
Center For River Studies Virtual Tour
Awards Banquet

Many thanks to the LSU Student Chapter for all of the effort it organizing this conference. We have many Section Members who volunteered a speakers and as judges.

Note to that the LSU Student Chapter was awarded on April 1st a"2021 Certificate of Commendation" by ASCE in recognition as an outstanding Student Chapter of ASCE. Congratulations!

The Baton Rouge Chapter will be hosting the 2021 Virtual La ASCE Conference May 6 & 7. Members will be able to obtain PDH's and the 1 hour required Ethics PDH. We will have our quarterly Board Meeting on Thursday and the General Membership Meeting on Friday. Outstanding Senior and Junior Awards will be announced on Friday. We all need to give Molly and the Baton Rouge Branch a big Thank You for pulling this all together but especially Jarrett Bauer for his efforts.

This past March ASCE announced the "Deep Dive-ASCE 2021 Report Card for America's Infrastructure. ASCE continues to support Boosting Infrastructure Funding, Advancing Resilient and Sustainable Infrastructure, Optimizing and Expediting Project Delivery, and Reauthorizing Long-Term Infrastructure Programs

The Louisiana Section will be updating our Report Card in the First Quarter of 2022. Jan Evans and I have asked members from all corners of the state to serve on the Executive Committee. We still need professionals to volunteer to serve in the 12 different infrastructure areas to be graded. If you are interested in volunteering please let us know.

The Louisiana Legislature starts on April 12th, 2021. I still have hope that they will tackle the issue this session on the Lack of Funding dedicated to the maintenance and construction for our Highways & Bridges. I encourage each of you to visit with your local representative this spring on this very important issue.

In closing I hope everyone is staying safe. I had the Covid after the Xmas Holidays and have had the vaccination. Everyone continue to follow the CDC Guidelines, Wear a Mask, Wash your hands frequently and Social Distance. Hopefully soon things will get back to normal.

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Emergency Barge Structures

Assessment, Preparation, and Installation

By: Laura L. Barnes, PE & Curtis "Trey" Middleton

Laura L. Barnes, PE

Curtis "Trey" Middleton

June 1st.....the start of Hurricane Season.

In July 2020, the South Lafourche Levee District (SLLD) issued Notice to Proceed to Sealevel Construction on the permanent flood control structure to be constructed in Grand Bayou, Lafourche Parish, Louisiana. This structure is the 14th flood control structure being constructed along the Morganza to the Gulf Interim Hurricane Risk Reduction System (MTTG), 99 miles of levee linking Gibson, LA to Lockport, LA.

The Grand Bayou Floodgate is located approximately 3.2 miles southwest of Larose, LA, consisting of 275 LF of braced floodwall and a 147-FT barge gate. Construction began at the start of the unprecedented 2020 hurricane season. Not having a completed structure in place left a vulnerability in the risk reduction system at this location.

Local levee districts considered, and then abandoned, an emergency closure ahead of Hurricane Laura. This provided officials, GIS Engineering, LLC (GIS), and Sealevel a "rehearsal" for the actual emergency closure a few weeks later.

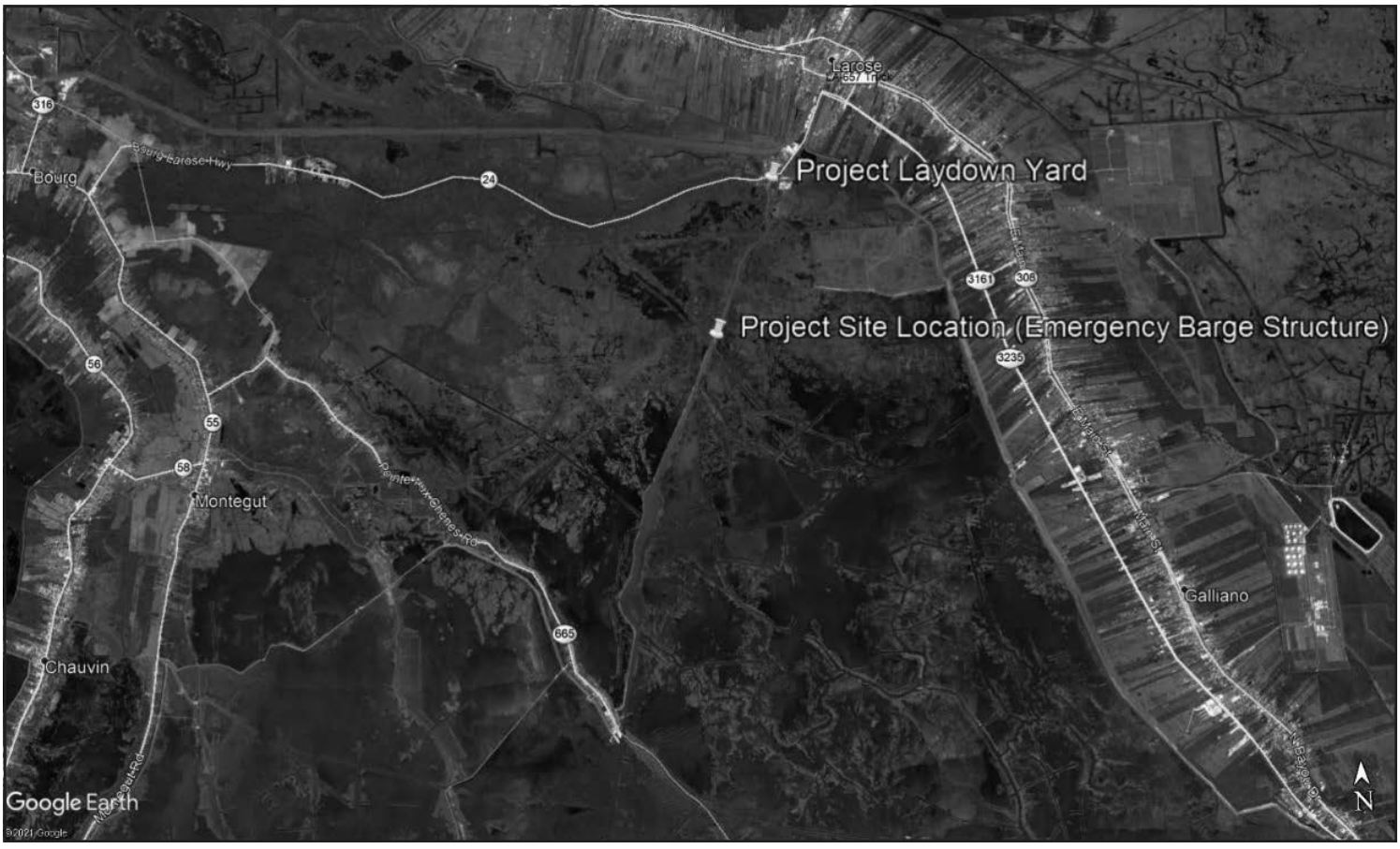
On October 5, 2020, the State of Louisiana issued an Emergency Declaration as Hurricane Delta was the 6th named storm projected to directly impact the coastline. In a matter of days, this storm was projected to strengthen from a Tropical Storm to a Category 3 Hurricane.

The Coastal Protection and Restoration Authority (CPRA), Terrebonne Levee and Conservation District (TLCD), SLLD and other State and local authorities agreed that an emergency closure was warranted.

This article will provide an overview of the decision-making, engineering, and construction processes that enabled the emergency closure effort.

Project Location

For this emergency response there was already a Contractor performing construction activities for the Grand Bayou Flood Control Structure, where the emergency barge location was chosen.



Communication

Throughout all phases of an emergency, communication is a critical factor in the project success.

As it relates to an emergency construction project, the key participants in the communication "game" are: colleagues and coworkers, contractors, clients, any funding agencies, and the public.

While all construction projects require timely communication, a sense of urgency is imperative for an emergency project to be successful. All the requests for information, whether from the client, the funding agency, the public, or the contractor, require immediate responses. Engineers typically provide weekly and/or monthly project updates; however, an emergency project can require hourly updates of construction progress.

All communications must be precise; giving clear directions and making clear requests. This is necessary to help alleviate miscommunication and prevent incorrect actions.

Conceptual Design

Site assessment. The first step in the conceptual design was site assessment. GIS and owner representatives identified system weaknesses in advance of the emergency. Considerations: Is backwater flooding or storm surge anticipated? Are levees constructed to a targeted elevation? Are there gaps in levee segments? Are pump stations operational?

The next step was to determine the existing channel width and depth. In the conceptualization phase, utilizing Google Earth as well as existing construction surveys accomplished this. To verify this data, time also allowed additional survey to be performed.

Finally, the team identified a laydown yard and access route to the emergency construction site.

Brainstorming Solutions. With the site assessment complete, GIS and the owner's representatives developed a design concept. The team brainstormed solutions to close-off the waterway and mitigate the possible storm surge through this opening in the system. It was quickly determined that this could be accomplished by constructing a braced sheetpile wall or installing a sunken barge.

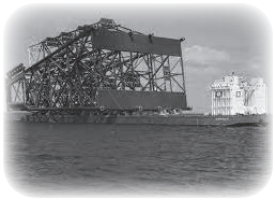
Solution Selected. Due to material availability and time constraints, the sunken barge solution was selected for the Grand Bayou (2020) emergency closure, similar to prior closures on Bayou Chene (2016 & 2019).

Design Considerations: Channel Closure. Once the decision was made to proceed with installing a sunken barge, the team performed a high-level evaluation of the barge options available:

1. **HOPPER BARGE**
   - Pros
     - Readily Available
     - 24-Hr Delivery Time
     - On-Charter Survey (required for marine vessels Already Performed
   - Cons
     - Height of the barge would not provide targeted level of protection
     - Length of the barge was significantly narrower than the channel width No Deck

2. **DECK BARGE**
   - Pros
     - Readily Available
     - 24-hr Delivery Time
     - Full Deck
     - Height & Length of Barge Suitable for Channel Dimensions
   - Cons
     - On-Charter Survey (required for marine vessels) Needed
     - Insurance Requirements

3. **SUBMERSIBLE BARGE**
   - Pros
     - Self-ballasting
     - Designed for Submersion
     - Full Deck
     - Reinforced Sub & Ext. Structure
     - Available in Numerous Sizes
   - Cons
     - Not Available
     - High Cost



Design Considerations: Level of Protection. The next main consideration was to determine the targeted level of protection. Based on weather forecasts and collaborative decision-making with the local agencies, it was determined that the emergency structure would be designed to an elevation +/- 8'. The expected outcome of this design was that it would reduce surge impacts. For this application, there were two main options considered to achieve the elevation; steel sheetpile and super sack sand bags.

1. **SHEET PILE**
   - Availability and Lead Time of Materials
   - Length and Qty Needed Would Result in Purchasing Additional Sheets
   - Eliminates Scour Under the Barge Structure
   - Installation Logistics
   - Would Have Required Equipment to be on the Flood Side

2. **SUPER SACK SAND BAGS**
   - Pre-filled and Readily Available
   - Installation Logistics
   - All Equipment Remained on Protected Side

Design Considerations: Scour Protection. Once it was determined to be more feasible for the contractor to acquire and stack the sand bags on top of the barge, potential scour underneath the barge had to be addressed. This could be accomplished by installing rock on the flood side of the barge, by installing tiger tubes underneath the barge, or by installing sheetpile around the barge. Again, the pros and cons within the time constraints of both options were considered.

1. **ROCK ON FLOOD SIDE OF BARGE**
   - Readily Available
   - Ease of Installation
   - Less Likelihood of Complications
   - Less Impacts on the Current Project

2. **SHEET PILE AROUND BARGE**
   - Not Readily Available
   - Installation Logistics

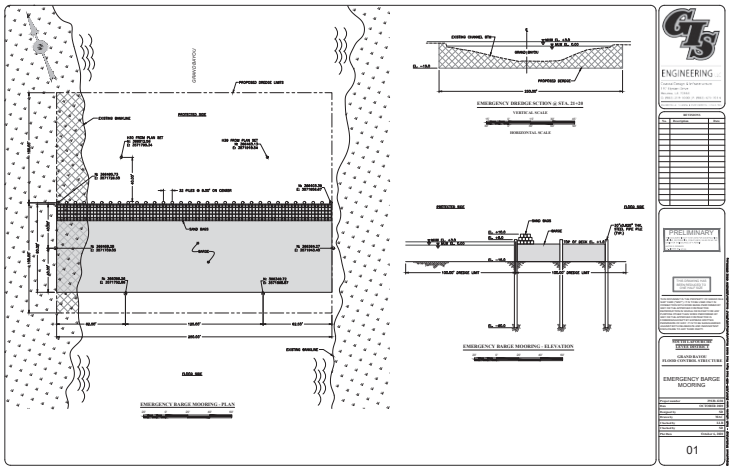
3. **TIGER TUBES UNDER BARGE**
   - Not Readily Available
   - Potential Placement Complications
   - Increased Odds of Damage during Installation and Removal

There was collaboration between CPRA, SLLD, TLCD, GIS, and Sealevel on all design considerations; however, they all relied heavily on the Engineer for recommendations to best protect the health and welfare of the public during this time.

Finalizing the Design - Day 1

With the conceptual design criteria established, GIS was responsible for quick delivery of the emergency closure design. The design had to provide enough information for Sealevel to construct the emergency closure and meet the intended goal of impact reduction, but it also had to be installed quickly. For this project, design considerations included:

- Uplift forces on the barge
- Overtopping
- Barge loading
- Super sack sand bag layout
- Geotechnical consideration
  - Pipe pile lengths, quantity, and layout
  - Pipe pile availability and procurement
  - Design must consider immediate material availability



Conceptual design used for emergency construction.

Logistics and Coordination

For this operation, there were activities that required logistical support; one of the main areas being the availability of equipment and material. GIS leaned heavily on the Contractors to locate, secure, and transport items such as the barges, pipe piles, super sack sand bags, and other equipment.

Because Grand Bayou is a navigable waterway, GIS contacted the New Orleans District of the US Coast Guard to advise them of the emergency waterway closure. Details provided to them included location and duration of closure. The US Coast Guard then issued a Notice to Mariners and provided the navigation lighting requirements for construction.

Another support need identified was underwater inspection. Knowing that the barge position had to be verified, GIS procured the services of a dive crew. GIS then coordinated with Sealevel to assist the divers in mobilizing to the site, setup, and demobilization.

During Sealevel's marsh buggy excavator mobilization, GIS was notified that there were nighttime restrictions for the police escort. GIS then coordinated with State and Local authorities to facilitate the permit that allowed the escort to resume.

Due to the approaching storm, TLCD had already closed all floodgates in the area. Because marine equipment was being mobilized to the site, access through some of the closed waterways was required. GIS coordinated with TLCD to open the necessary floodgates to allow the barges to pass.

Construction Approach

There are some key differences between a typical construction project and an emergency project.

Typical Construction. With a typical construction project, public bid laws prevail with regards to the timing that allows contractors to bid, the bid evaluation process, and the award process to the lowest responsible, responsive bidder. Stamped drawings, front end documents and technical specifications are all part of the finalized package that contractors use to construct the project. There is typically a formal submittal and request for information (RFI) process that the contractor and engineering firm use to insure that the right materials are being used and that requests for clarification are responded to in a formal way. Also, in standard construction, the Engineer is not responsible for the Contractor's means and methods. Finally, concerning project time, typical construction allows for weather days and time extensions; and the working hours are normally daylight hours.

Emergency Construction. Contrary in many ways to typical construction is emergency construction. When selecting a contractor, about the priority is emergency response – who is available to mobilize immediately? Is there a contractor already on site? Does the Engineer need to quickly solicit quotes? The drawings created during this project are often conceptual sketches, and allowable time will determine whether stamped drawings can be created. There is no formal submittal and RFI procedure. Decisions and material selections are usually made via phone calls or emails. During construction, the engineering team assumes more of a directing role with regard to the construction process. The Engineer drives the progress schedule, calling in other contractors and support roles, as necessary. Also in an emergency, there is limited downtime for inclement weather; working hours may likely be 24/7 to complete the project in time.

Grand Bayou Construction Timeline

Day 1 – Tuesday, October 6, 2020

On Day 1 of this Emergency Effort, a Full Scale Emergency Mobilization began and continued over the next couple of days. The Construction Contractor was essentially given Notice to Proceed at this time, but Sand Bag delivery had already begun overnight. The bulk of the equipment and personnel needed for the effort arrived in the first day. This involved much of what is listed below:

Equipment and Personnel for Emergency Work

Site Crews

Survey Crews

Construction Crews

Dive Support

Emergency Barge

Portable Pumps

Crane Barges

Material Barges

Support Tugs

Support Boats

Rock Barges

Marsh Buggy & Land Excavators

Welding Equipment

Pile Driving Equipment

Day 2 – Wednesday, October 7, 2020

With most of the equipment arriving on Day 1, material began arriving at the Laydown Yard on Day 2. This included continued delivery and stockpiling of the Sand Bags, as well as the 30" pipe piles that would later be installed to secure the barge in position.

It had been determined during the design process that the pipe piles for the center of the barge would need to be longer than the lengths that were available for immediate delivery, so Sealevel set-up pile splicing/welding stations in the laydown yard. At these stations, pipe piles ranging 55' to 64' in length were spliced together by welding.

With operations in full swing at the Laydown Yard, the CBC MIAMI deck barge arrived at the Project Site. 4", 6" and 8" portable pumps were set-up on the deck to begin filling the interior compartments with water to ballast (sink) the barge. Given the size of the barge (240'L x 80'W x 16' H), this was a lengthy process that continued over the next 2 days.

With filling of the tanks underway, the delivery of Super Sack Sand Bags began at the Project Site. Once on site, barge cranes (derrick cranes) were used to place the bags onto the deck of the CBC MIAMI. During the design process, the sand bag layout was determined and provided to Sealevel. The bags were to be placed on the deck, 4-wide from the centerline of the barge towards the protected side. A layer of 3, then followed by a layer of 2 were placed on top of the base layer. The placement of the sand bags was a process that took until early morning on the last day (Day 4) to complete.

Review of the site survey revealed that the channel banks and slopes would impact how flat the barge was going to lay on the bottom of the channel, so marsh buggy excavators were mobilized to begin dredging/excavating the outer slopes of the channel bottom. These excavators were later used to close-off the ends of the barge and tie-into the existing levees.

Laydown yard operations, Oct 6, 2020.

Once the excavation of the channel banks was complete, an additional survey was performed and the results indicated that the barge could now be positioned for the channel closure for continued ballasting (sinking). Tugs were used to position the barge perpendicular to the channel in its pre-determined location. A combination of tugs and marsh buggy excavators were used to hold the barge in position until it was secured by the 30" pipe piles.

Positioning barge and beginning to place super sacks, Oct 7, 2020

Day 3 – Thursday, October 8, 2020

Laydown Yard operations continued with sand bags being loaded-out by barge. Sand bag delivery was winding-down and complete before the end of the day. Pipe pile delivery, pile splicing, and pile load-out continued.

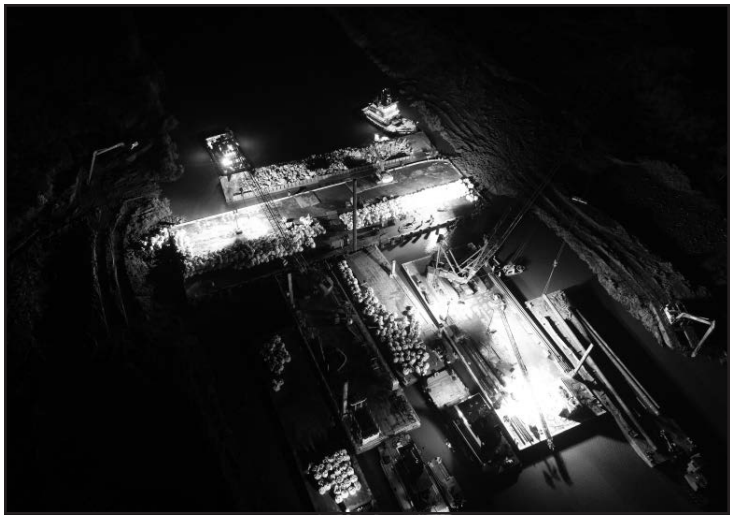
At the Project Site, pipe pile installations were underway and the barge was secure enough to be released by the equipment holding it. The marsh buggy excavators started placing embankment material on each end of the barge to form the levee tie-ins.

One crane barge continued to place sand bags on the deck of the barge, while the other was installing the pipe pile needed to secure the barge. In the design process, a pile layout was developed that included a total of (37) pipe piles needed to secure the CBC MIAMI. (32) piles were required along the protected side edge, (1) pile on each end, and (3) piles along the flood side of the barge.

With the rock barge in route carrying the 250-lb class riprap, divers mobilized to the site for a pre-rock placement inspection along the flood side of the barge. The divers worked their way from one end of the barge to the other, inspecting the bottom and identifying any voids that could cause potential scour issues. The divers identified a few areas along the mid-section of the barge that had a gap of approximately 1'. At that point, Sealevel was directed to place sand bags to fill the voids in order to mitigate damage to the underside of the barge by placement of the rock. A follow-up dive inspection revealed that the voids had been filled, and preparations were made for riprap installation.

Sealevel mobilized an excavator to the site and positioned it on the deck of the CBC MIAMI, using laminated mats to prevent damage to the deck. Traversing the barge, the excavator offloaded the rock barge and placed the riprap along the flood side edge of the CBC MIAMI. This operation continued for the remainder of the evening and into the early morning hours on Friday (Day 4).

Pile driving operations in the early morning hours of Oct 8, 2020



Nearing completion of the emergency construction in the early morning hours of Oct 9, 2020

Day 4 – Friday, October 9, 2020

Deliveries to the Laydown Yard concluded on October 9th. Demobilization began, and equipment was secured for the approaching storm.

Sand bag placement on the barge deck and embankment tie-ins, as well as the last of the pipe pile installation was completed in the early morning hours.

Equipment was demobilized from the site and construction barges were secured for the approaching storm.

The rock barge was demobilized upon the completion of unloading and placement of the riprap.

Equipment was secured and installation of the Grand Bayou Emergency Barge Structure was complete by 10:00 AM.

Link to the Emergency Barge Installation video: https://youtu.be/PvJKuSuKAFc

Complete emergency barge closure, Oct 9, 2020

Removal

Due to the active hurricane season and the fact that there was another hurricane landfall just weeks following the installation of the Emergency Barge, it was determined that the CBC MIAMI would stay in place until the end of the 2020 Hurricane Season.

During this time, a Request for Quotes (RFQ) was issued for the excavation of a bypass channel around the East end of the barge structure. The channel was required for marine navigation since the barge would remain until the end of November. The bypass channel was excavated, and then closed in another emergency response for Hurricane Zeta. After Zeta passed, another RFQ was issued for re-excavation of the bypass channel. At this time, barges and tugs were trapped on the protected side of the structure. With the re-excavation complete, all remaining barges and tugs were allowed to demobilize from the site.

Finally, an RFQ was issued for removal of the barge structure. As a precaution to additional hurricane threats, the base quote of the RFQ included a partial removal of the structure, leaving some of the pipe piles in place. The additive alternate allowed for the full removal.

Quotes were received and reviewed; the low quote was selected; and full removal of the barge structure was awarded. This operation began on November 30th and was completed by December 6th.

In addition, there were some variables that could not have been accounted for at the time the RFQ was sent out, so the extent of the barge cleaning and barge repairs were determined later in December.

Lessons Learned / Recommendations for Future Emergency Response

Establish Shiftwork (As Possible)

Depending on the timeline available for the emergency construction, it is advisable to create shift schedules that include a project manager and construction manager on each shift. Realistically, that schedule would include 12-hour shifts.

Improve Documentation Procedure

Because accessing a laptop is difficult during this time, consider creating a daily or shift reporting template that can be accessed and completed on one's mobile device.

Consider Site Specific Emergency Options in Advance for Projects

Develop a Team List of Personnel & Roles Needed in Advance (Shown Below)

PERSONNEL NEEDS	ROLES/RESPONSIBILITIES
Program/Project Manager	Project Management; Client Interface
Engineering Support	Structural & Civil Design; Calculations
Geotechnical Support	Geotechnical Design; Calculations
Construction Manager(s)	Site Management; Project Team/Client Reports, Updates & Coordination; Contractor Interface & Coordination
Project Rep(s)	Site Inspection; Daily Reports; Photo Documentation; Boat/UTV Operation; Contractor Interface; Quantity Tracking
Survey Crew/PLS	Pre, During, & Post Project Survey Needs; Elevation/Location Checks; Layout
Logistics	Personnel Scheduling Assistance; Materials; Subcontractor Coordination; Assisting w/ Communications
Runner	Fuel Delivery; Food Pick-up/Delivery; Safety Equipment/Material Pick-up
CAD Tech(s)	Drafting Plans; Site Layout
Admin Support	Office Needs/Support for Field Personnel; Assistance with Documentation Needs
Project Controls	Billing; Job Code Setup; Subcontractor Setup

Laura Barnes, PE, is a project and program manager with nearly 20 years of experience performing and managing civil engineering design and construction projects. Barnes' experience includes flood control structures, levees, marsh creation projects, and municipal water supply, treatment, and distribution systems. Barnes is a licensed PE in Louisiana, Texas, and Mississippi.

Curtis "Trey" Middleton is a Construction Manager with over 17 years of experience working in the construction industry and has spent the last eight years performing construction inspection and administration of flood control structures, pump stations, levee systems, and drainage structures. Middleton also has experience performing construction oversight on road reconstruction and mitigation projects. Middleton's experience includes working with local Parishes and Levee Districts during emergency operations of flood control structures and assisting with coordination and operations during numerous storm/flood events. Middleton is also an FAA-licensed drone pilot, a skill he uses for project monitoring and reconnaissance on both active and potential construction sites and photogrammetric surveys.

ASCE Region 5 Governor's Report

By Rudolph A. Simoneaux, III, PE, Region 5 Governor

Rudolph A. Simoneaux, III, PE

NEW BOARD MEETS TO ADDRESS CHALLENGES AHEAD

By Ben Walpole, Aff.M.ASCE • *bwalpole@asce.org*

As a new year begins, cybersecurity has emerged as a vital concern in the civil engineering profession. The ASCE Board of Direction took steps during its quarterly meeting, held virtually January 16, 2021 to ensure that the Society is working quickly to give its members the tools to protect themselves from cyberthreats. Or, as Region 7 Director Edward Stafford said during the meeting, "It's not just about technology or having the right patch. It's about people." ASCE's Industry Leaders Council convened a working group in 2019 to research cybersecurity threats and recommend potential Society action. And this month, the Board received the working group's report and voted to authorize further exploration of market needs and potential implementations of those recommendations.

"There is a need for all civil engineers to be trained to be vigilant and educated in what the threat is, what form it can take, how to recognize it, and how to take precautionary measures," said ASCE President Jean-Louis Briaud. "I believe that ASCE has a responsibility to help our members be better prepared to defend against cybersecurity issues."

President-elect Official Nominees

The Board of Direction Nominating Committee selected the official nominees for ASCE 2022 president-elect. They are Maria C. Lehman, PE, ENV SP, F.ASCE, and Peter M. Moore, PE, ENV SP, LEED AP, F.ASCE. The ASCE election runs May 1 through June 1, with the successful nominee set to serve as the ASCE president in 2023.

Visualizing 2070

The Future World Vision project reached another funding milestone, as the Board voted to fully actualize the Mega City 2070 world. A prototype version of the Mega City debuted last fall at the ASCE 2020 Convention. "Future World Vision is our star project," President Briaud said. "It impacts one issue where moving the needle is very difficult: the public image of civil engineers. It does that by being equally appealing to the 10-year-old youngster and the 70-year-old senior. It is equally appealing to non–civil engineers and experts in our field. It reaches across the masses. "It is an inverted time capsule that predicts what the world will be like 50 years from now. The younger generation will be able to look back when they are my age and decide if ASCE's Future World Vision was correct or not. In the meantime, Future World Vision helps us dream, be excited, plan, and create our future."

Other Highlights

The Board authorized creating a new task committee to potentially expand ASCE's offerings to serve people who are a part of the civil engineering team but are not necessarily civil engineers. The Task Committee on Building the Civil Engineering Team of the Future will report back to the Board with recommendations in the next year.

The Board approved three new public policy statements focused, respectively, on the importance of expanding access to broadband communications, supporting forward-thinking environmental policy, and a national energy policy that promotes the development of clean and renewable energy sources. See the complete list of ASCE's policy statements.

Membership continues to be the central priority for ASCE. The Board received an update on the 2020 Section Member Drive, which rallied Society groups in a friendly competition to recruit the newest ASCE members. The Hawaii Section won the 2020 drive and the $1,000 prize, followed by the Los Angeles Section ($750) and the Philippines Section ($500). The Philippines Section also generated the most member referrals among the sections.

The Student Presidential Group, a group of ASCE student leaders that meets regularly with President Briaud, updated the Board on the staff and volunteer feedback collected based on the recommendations it presented last fall at the October Board meeting. The group's ongoing work centers on developing Society programs and resources to help students, help student chapters, and improve student recruitment and retention.

The Board approved on first reading several documents from the Governing Documents Committee, including amendments to the bylaws that would realign participation in the Society's annual student conferences along the geographic region lines. Each item will come before the Board again in the spring for second reading approval.

Outstanding Civil Engineering Achievement (OCEA) Honor Award Mr. John Proskovec, Kiewit Infrastructure South, South Central District

Mr. John Proskovec, Kiewit Infrastructure South, South Central District, of the **Louisiana Section**, has been selected by ASCE to receive an *Outstanding Civil Engineering Achievement (OCEA) Honor Award* for the "Permanent Canal Closures and Pump Project."

Region 5 Former Directors and Governor's Advisory Council
Many of your former leaders of Region 5 still share a passion for ASCE and seeing Region 5 succeed. To help accomplish this goal, a council has been developed to serve as a sounding board and resources for the Region 5 Board of Governors. The group is meeting monthly to supplement the Region 5 BOG's skills and abilities to help guide the organization toward its stated mission.

Currently, the council is developing bylaws and goals. The council looks forward to working together for the benefit of Region 5! Any questions can be directed to Melissa Wheeler Black, Chair. (mswheele@southernco.com) or Eric Czerniejewski, Vice Chair (eczerniejewski@gmail.com)

- May 6-7, 2021 - LA Section Spring Conference (Virtual)
- July 8-9, 2021 - FL Section Annual Conference (Fort Lauderdale, FL)
- July 12-14, 2021 - AL Section Meeting (Orange Beach, AL)
- October 6-9, 2021 - Annual Convention (Chicago, IL)

Region 5 Board of Governors

Our Region 5 Board of Governors is here to connect you, the ASCE members of Region 5, to ASCE at the Society level. Please contact your Governors at the email addresses indicated below; we want to hear from you!

- **Lawren Pratt, PE, LEED AP, M.ASCE** R5
  Director, Alabama Section
  lawren.pratt@bargedesign.com

- **Bradley Williams, PE, M.ASCE** R5
  Governor, Alabama Section
  williamsbr@alabama.asce.org

- **Marta P. Alonso, PE, ENV SP, M.ASCE** R5
  Governor, Florida Section
  malonso@hazenandsawyer.com

- **Sarah L. Matin, PE, M.ASCE** R5
  Governor, Florida Section
  smatin@smeinc.com

- **Rebecca Shelton, PE, F.ASCE** R5
  Governor, Georgia Section
  rebecca.shelton@gwinnettcounty.com

- **Ronald L. Schumann, Jr, PE, M.ASCE** R5
  At Large Governor, Louisiana Section
  rschumann@ilsiengineering.com

- **Rudy Simoneaux, PE, M. ASCE** R5
  Governor, Louisiana Section
  rudy.simoneaux@la.gov

- **Jennifer Sloan Ziegler, PhD, PE, ENV SP M.ASCE** R5
  Governor, Mississippi Section
  jennifer.s.ziegler@gmail.com

- **Hector Colon de la Cruz, EI, M.ASCE** R5
  Liaison, Puerto Rico Section
  hectorcolondelacruz@gmail.com

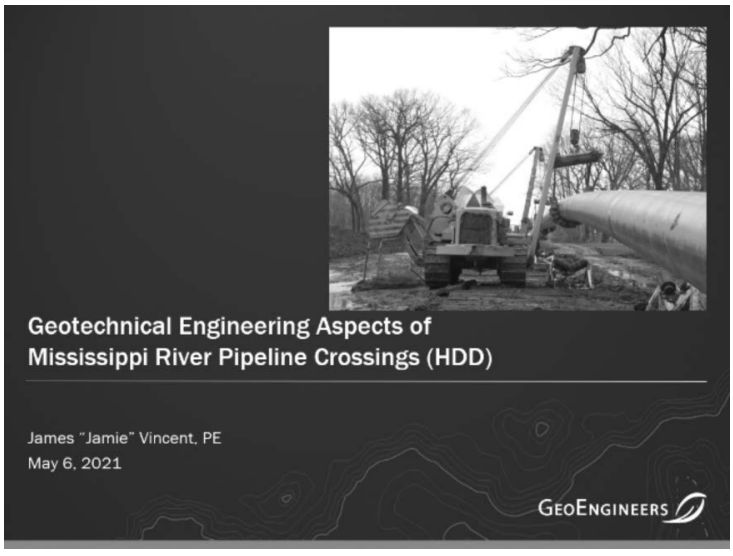
Region 5 Website
Visit us at
http://regions.asce.org/region5/

2021 ASCE Section Spring Conference

The 2021 ASCE Section Conference was hosted this year by the ASCE Baton Rouge Branch beginning Thursday, May 6 through Friday, May 7. The Conference was held completely virtual this year and was a tremendous success! Special thanks goes out to the ASCE Baton Rouge Branch committee members that helped plan and organize the event; including: Matt Salmon, PE, Mary "Molly" Bourgoyne, PE, and Jarret Bauer, PE. The Branch would also like to recognize our volunteer moderators for the event, Tyler Branch, PE, Mary "Molly" Bourgoyne, PE, and Jarret Bauer, PE. Lastly, the biggest thank you goes out to our unofficial "moderator" for the entire conference, Matt Salmon, PE. His technical support behind the scenes kept the virtual platform running incredibly smooth!

The lineup for this year's conference included a variety of topics and speakers, including a special appearance from two ASCE National President-Elect candidates, and the Conference averaged around 50 attendees per day. To make it a true "Section" conference, we made sure to represent each of the local branches around the State by securing a speaker through each Branch's recommendation.

Thursday's event began with Opening Remarks from our current Branch President, Mary "Molly" Bourgoyne, PE. No conference is without hiccups, though, as Molly actually lost power ten minutes before her scheduled remarks to open the conference. Kudos to her for adjusting on the fly, logging back in through her cell phone, and handling those opening remarks!



The flow transitioned perfectly to Jamie Vincent, PE presenting on "Geotechnical Engineering Aspects of Mississippi River Pipeline Crossings (HDD)." Vincent gave a great presentation detailing the HDD process and some of the geotechnical-related limiting factors with soil types along the River. Vincent's speaker recommendation came from the ASCE Baton Rouge Branch.

Tim Nickel, PE followed up the HDD presentation with an update on the "Loyola Interchange Design-Build Status." This project has been a high-visibility project with a tremendous of geotechnical, traffic, and construction management-related tasks. The interactions with the New Orleans International Airport, and the end goals of this projects are impressive. The multi-disciplinary coordination by LaDOTD was impressive, and we cannot wait to see the end result! Thank you to the ASCE New Orleans Branch for their recommendation!

The conference shifted gears following Nickel, with a detailed presentation from Robert Miller, PhD, PE on "Modeling the Response of Water Temperature to Dredging of the Vermillion River in Coastal Louisiana." Dr. Miller's presentation was informative and incredibly detailed. The predicted water temperature fluctuations were interesting, and Dr. Miller's passion on the topic was clear. Thank you to the ASCE Acadiana Branch, and to Algy Semien, PE, for your help and recommendations!

We rounded out the first day with Derek Berthelot, presenting on "High Density Polyurethane Grouting for Soil Stabilization." Berthelot represented Uretek USA, Inc, and was able to detail some fantastic applications for the product. Thanks to the Shreveport Branch for their speaker contribution!

Day two of the conference began with Opening Remarks, again from our Branch President, but with full power this time! We were fortunate enough to secure the first hour for ASCE National President-Elect Candidacy Speeches, by Maria Lehman, PE, ENV SP, F. ASCE and Peter Moore, PE, ENV SP, LEED AP, F. ASCE. The format was smooth, with each candidate delivering a brief candidacy speech and then alternating leads to respond to member questions. Thanks to LA Section for helping secure these speakers!

Finally, Chris Knotts, PE rounded out our program with a presentation on "Professionalism and Ethics in Engineering" followed by the Virtual General Membership Board meeting, where new LA Section leadership officers were elected and installed, and general updates were provided from each Branch and Committee.

In total, the conference was a great success, offering a total of five PDH opportunities for over 50 attendees for a nominal, one-time $10 registration fee for both days. We really appreciate everyone's involvement, and we were happy to coordinate an event that benefitted the membership from around the State!

ASCE-COPRI Louisiana Chapter News

By Gerald Songy, PE, Director – Communications

COPRI
COAST, OCEANS, PORTS AND RIVERS INSTITUTE
Louisiana Chapter

Gerald Songy, PE
Director – Communications

The Louisiana Chapter of the American Society of Civil Engineers (ASCE) Coasts, Oceans, Ports, and Rivers Institute (L.COPRI) is continuing to promote membership and visibility throughout the State of Louisiana during the COVID-19 pandemic by conducting virtual webinars free of charge. The chapter is committed to continuing to provide professional development hours by hosting technical webinars throughout the pandemic and will consider hosting an in-person seminar once conditions improve.

L.COPRI Spring Webinars (since June 2020)

The COPRI-Louisiana Chapter has remained active throughout the COVID-19 pandemic and has hosted three technical webinars since June 2020. The following webinars were hosted with attendee numbers ranging from 60 to 130:

Port of New Orleans Master Plan Update by Amelia Pellegrin (Port of New Orleans)

A Review of the 2018-2019 Mississippi River Flood by Suzanne van Cooten (National Weather Service)

Open Ocean Aquaculture: Big Water, Big Challenges, and Big Opportunities by Matthew Campbell (NOAA)

Development of Oyster Management and Restoration Strategic Plan for Louisiana by Patrick Banks (LA Dept. of Wildlife and Fisheries)

Louisiana State Led Climate and Resilience Initiatives by Charles Sutcliffe (Chief Resilience Officer – Governor's Office of Coastal Activities)

Barrier Island Restoration Projects: Design and Construction of Erosion Protection and Beach Nourishment by Rudy Simoneaux and Kazi Sadid (Coastal Protection and Restoration Authority – Engineering Division)

Scholarship Announcement

We are happy to announce the availability of two $500 scholarships awarded by the Coasts, Oceans, Ports and Rivers Institute Louisiana Chapter (L.COPRI) to one graduate and one undergraduate student studying Civil, Coastal, Ocean or Environmental Engineering in Louisiana. The minimum criteria to be eligible are as follows:

1. You must be a graduate or undergraduate student studying Civil, Coastal, Ocean or Environmental Engineering in Louisiana

2. You must be in good academic standing with the College of Engineering (must be able to verify if shortlisted)

3. You must have a minimum 2.5 Overall GPA (must be able to verify if shortlisted)

4. You must be a member of a student professional organization. Preference will be given to ASCE/COPRI members.

Please contact Victoria Curto at victoria.curto@mottmac.com for application and further information.

Upcoming events

The COPRI-Louisiana Chapter endorses the Pontchartrain Conservancy Storm Sweep and plans to participate in the event by selecting one day during the month of May to gather and participate. Please see the information and registration link below, and stay tuned for more information.

Pontchartrain Conservancy will hold its Sixth annual Storm Sweep (previously known as Spring Sweep) as a month designated to clean up the Lake Pontchartrain Basin this May. Hurricane season is on the way, and we intend to be prepared! You can help prepare our communities for the coming summer rains. Join us for a catch basin

and neighborhood clean-up, become an event sponsor, or both! Together we'll remove trash and debris so that our catch basins can adequately route stormwater out of our neighborhoods.

Registration Link: https://scienceforourcoast.org/stormsweep2021/#register

Other Information

The activities of L.COPRI will include seminars, workshops and other activities to benefit all ASCE and COPRI members. One does not have to be an Engineer to join COPRI. These Institutes are formed for the benefit of ASCE and non-ASCE members to participate and interact with other professionals interested in coastal, oceans, ports, and riverine efforts in Louisiana. Our chapter is currently planning another webinar for early Summer, and we are hopeful to have an in-person seminar in the Fall. We would like to extend an invitation to our members to submit feedback and ideas for upcoming webinars. Please submit these ideas to gsongy@moffattnichol.com, and stay-tuned for a meeting invite if you are a member of our COPRI email list.

POSITION OPENING

COPRI is recruiting members at each chapter to serve as a Diversity and Inclusivity point of contact. In the near term, this person would interact with the president of COPRI and ASCE's MOSIAC initiative *(https://www.asce.org/diversity-and-inclusion/)* as a representative of the Louisiana Chapter.

If you feel you're a COPRI member who feels like you have a passion for the subject and availability to contribute, please email chapter chair Tyler Ortego at ***Tyler.Ortego@forterrabp.com.***

Louisiana CIVIL ENGINEERING Conference & Show

SAVE THE DATE!
Call for Potential Speakers and Exhibitors!

We are proud to announce the dates for the 31st Annual Louisiana Civil Engineering Conference and Show. This event, a joint effort from the New Orleans Branches of ASCE and ACI, is the premiere gathering for the Civil Engineering community in the Greater New Orleans Area. We are in the process of soliciting sponsors and exhibitors and establishing the technical program for the fall conference which will be held on September 22-23, 2021, at the Pontchartrain Center in Kenner, Louisiana.

For additional information on the conference, please visit our web site at www.LCECS.org

ASCE-G-I Louisiana Chapter News

By Kirk Lowery PE, D. GE, Chapter Chair

Kirk Lowery, PE, D.GE
G-I Chair

The Geo-Institute Louisiana Chapter on May 4th virtually hosted a one hour seminar presented by John Charlie Wildman, PE, PG titled, "An Open Conversation About Sustainability for the Day-to-Day Geotechnical Engineer."

About 30 people attended this presentation about how the global climate is changing and is escalating threats to infrastructure. The civil engineering community has started upgrading its knowledge, skills, and attitudes to implement civil infrastructure that is resilient, sustainable, and efficient in an environment affected by a changing climate. This presentation provided introductory discussion to address the following questions regarding changing climatic conditions, civil infrastructure, and geotechnical engineering practice:

- What's happening?
- Why do we care?
- What have others said about this?
- What can we do? And
- Where do we go from here?

The Geo-Institute of Louisiana will continue to find opportunities in the near term to present relevant projects, policies, and design concepts in the geotechnical engineering practice. Please join us when those opportunities present themselves. If you have any questions, please contact **kirk.lowery@arcadis.com.**

Janet L. Evans, PE
Government Relations Chair

ASCE 2021 Virtual Legislative Fly-In

March 3 – 5, 2021

ASCE urged the 117th Congress, which convened January 3, 2021 and will conclude January 3, 2023, to work to prioritize our nation's infrastructure at this year's Fly-in. The Fly-in is an annual event that normally takes place in Washington DC in person; however, was held in virtual format March 3-5, 2021. The Louisiana Section's representatives were Kirk Lowery PE, D.GE and Nedra Hains, MA who met with several Congressional offices in "Virtual Hill Visits". The key messages were delivered on March 4, 2021 to Maggie Ayrea, Legislative Director in Congressman Graves' Office; March 5, 2021 to Blake Schindler, Policy Advisor; Owen Morgan, Policy Advisor; & Ron Anderson, Senior Policy Advisor attended for Senator Cassidy's office; and March 5, 2021 to Nathan Flagg, Environmental Issues Staff attended for Senator Kennedy's office. As part of the Congressional briefing, ASCE unveiled the 2021 Report Card for America's Infrastructure on March 3, 2021.

Lowery and Hains, in the Virtual Hill Visits conveyed the key message that the federal government should make infrastructure investment a centerpiece of its immediate response and long-term economic recovery strategy. ASCE urged Congress to focus first on prioritizing those aspects of our infrastructure most in need of repair, replacement, and modernization, to sustain our economy, public health, and safety. The first step should be to address major infrastructure priorities at the federal level: fixing the Highway Trust Fund, increasing the cap on the Passenger Facility Charge to modernize our nation's airports, increase funding for the Drinking Water and Clean Water State Revolving Funds, and provide adequate funding for our nation's dams and levees.

Key Messages

The 2021 Report Card shows incremental progress, but there is a lot more work left to do. - The *2021 Report Card for America's Infrastructure* reveals we have made some incremental progress toward restoring our nation's infrastructure. For the first time in 20 years, our infrastructure GPA is a C-, up from a D+ in 2017. We must build on this momentum through smart investment, which will only be

possible with strong leadership, decisive action, and a clear vision for our nation's infrastructure. We must increase investment across all levels of government and the private sector. And we must utilize new approaches, materials, and technologies to ensure our infrastructure can withstand or quickly recover from natural or man-made hazards. Furthermore, the Report Card demonstrates that there is room for sound policies that can be implemented to raise the grades.

Infrastructure investment should be a central component of an economic recovery package in Congress. ASCE's *Failure to Act* report series answers this key question—how does the nation's failureto act to improve the condition of U.S. infrastructure systems affect the nation's economic performance? When we fail to invest in infrastructure, we pay the price. Our failure to invest in infrastructure will cost the average American household an average of $3,300 a year for the next 20 years. ***Congress should pass a bipartisan infrastructure package*** that not only creates jobs and jump starts our economy but makes long overdue investments to our most critical infrastructure systems.

Future legislation needs to keep resilience and long-term reliable investment top of mind. - The anticipation for the Administration's Infrastructure Proposal is mounting. If we are to address the obvious needs as identified in the Report Card and the Failure to Act studies, we must invest wisely.

ASCE has identified several principles for Infrastructure Investment to offer guidance to Congress andthe Administration on how best to renew and revitalize the nation's infrastructure. Specifically:

- Prepare for a Sustainable, Resilient Future;
- Prioritize Asset Management and Operations and Maintenance Needs;
- Restore a Strong Federal Partner in Infrastructure Investment.

The 2021 Report Card for America's Infrastructure reveals we've made some incremental progress toward restoring our nation's infrastructure. For the first time in 20 years, our infrastructure is out of the D range.

The 2021 grades range from a B in rail to a D- in transit. Five category grades — aviation, drinking water, energy, inland waterways, and ports — went up, while just one category — bridges — went down. And stormwater infrastructure received its first grade: a disappointing D. Overall, eleven category grades were stuck in the D range, a clear signal that our overdue bill on infrastructure is a long way from being paid off.

Maggie Ayrea of Congressman Graves office said during the Virtual Hill Visits with Lowery and Hains, "Engineers are critical in showing us the efficient ways to solve problems." Part of the Fly-in mission is conveying ASCE's role in solving these problems. Nathan Flagg in Senator Kennedy's office expressed major concern for hardening the electrical grid and requested specific information about new tools potentially being used in Southwest Louisiana following the devastating hurricanes of 2020. Lowery and Hains were able to locate the right engineering experts and arrange a follow-up meeting with other ASCE engineers and Senator Kennedy's office to provide the engineering expertise they needed. The LA Section Government Relations Committee encourages you to schedule a Back Home Visit or attend a local town hall meeting or other event with an elected official to raise the issue of infrastructure. For more information on the Report Card for America's Infrastructure please see http://www.infrastructurereportcard.org. Please see ASCE National: https://www.asce.org/back_home_visits/ for more information or contact ASCE's State Government Relations programs or contact Caroline Sevier at 202-789-7855 or Maria Matthews at 202-789-7845.

GET CONNECTED!

80% of Hill staffers say that it takes **30 or fewer** similar comments on social media to get their attention

Find your Congressman's and Senator's social media links on their websites:

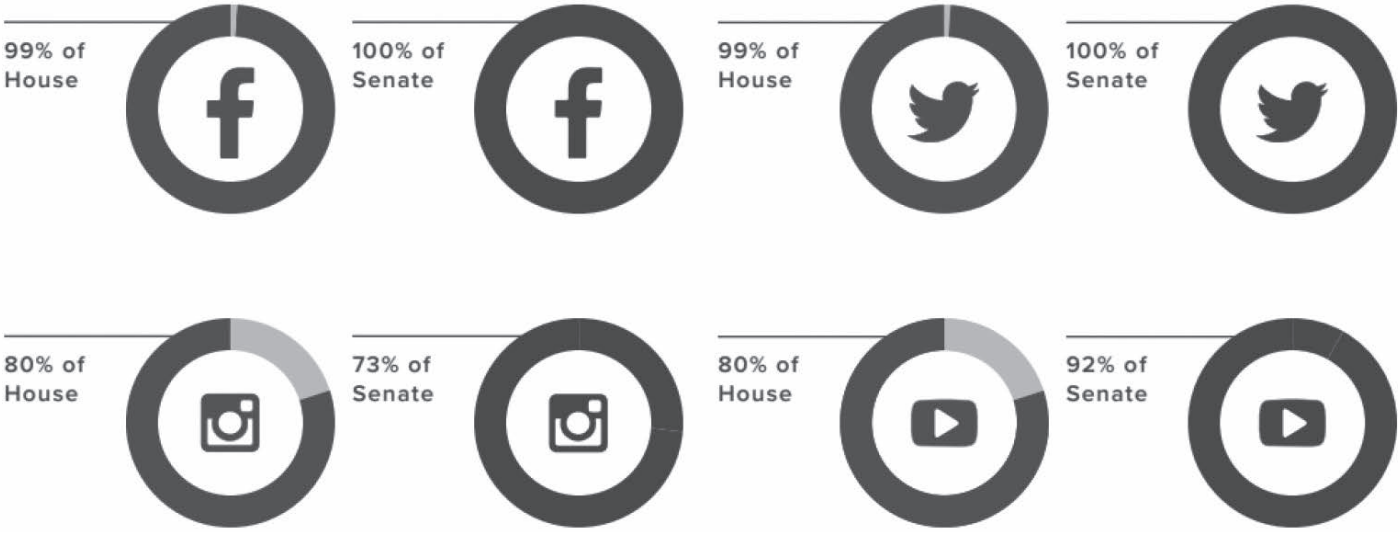
Senator Cassidy https://www.cassidy.senate.gov/
Senator Kennedy https://www.kennedy.senate.gov/public/
Congressman Graves https://garretgraves.house.gov/media-center/social-media
Congressman Higgins https://clayhiggins.house.gov/
Congressman Johnson https://mikejohnson.house.gov/
Congresswoman Letlow https://letlow.house.gov/
Congressman Scalise https://scalise.house.gov/

ASCE Social Media:
•Twitter: @ASCEGovRel
•facebook.com/ascegovrel

ASCE Louisiana Section:
•facebook.com/ascelouisiana

ASCE | ISSUES & ADVOCACY

Is Congress Really on Social?



Moving Forward with LA 1 Relocated Phase 2 Seminar

On February 23 the T&DI Louisiana Chapter hosted a virtual seminar on the topic of the LA 1 Relocated Project. Individuals from the DOTD Project Management Section initially presented a brief description of the work completed on the LA 1 Phase 1: Port Fourchon to Leeville Project. The presentation then focused on providing an update of the Phase 2: Leeville to Golden Meadow Project. The LA 1 Phase 2 Project will elevate an 8.3 mile stretch of at-grade LA 1 to 22 feet above surrounding bodies of water to eliminate frequent inundation and energy production impacts. The rural, two-lane roadway is the critical link to Port Fourchon, which handles nearly 90% of the active deep-water gas and petroleum extraction occurring in the Gulf of Mexico.

The three speakers from the Project Management Section were Tim Nickel, PE, Anna Hanks, PE and Ryan Morvant, PE. Tim Nickel, PE is currently a DOTD Project Management Administrator with over 22 years of experience in Geotechnical Design and Project Management. Anna Hanks, PE, is a Senior Project Manager in DOTD's Project Management Section, with 21 years of experience in Design and Project Management. Ms. Hanks currently serves as Project Manager for the LA 1: Leeville to Golden Meadow Phase 2 Project. Ryan Morvant, PE, is a Senior Project Manager in DOTD's Project Management Section, with 9 years of experience in Design and Project Management and has been a member of the DOTD Bridge Design and Project Management Sections. This seminar was 1 hour long, free to all those that registered and a certificate for one (1) PDH was issued to those that attended.

Pervious Concrete Information for Engineers, Architects and Specifiers Seminar

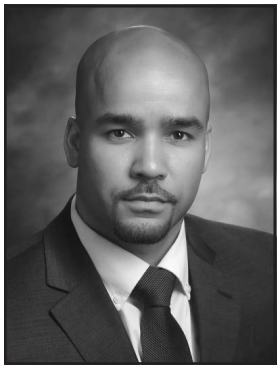
On April 28 the T&DI Louisiana Chapter hosted a virtual seminar on the increasingly popular topic of Pervious Concrete. Initially the seminar discussed the use of pervious concrete to satisfy storm water management and meet storm water permitting requirements in communities across the country. The seminar went on to discuss specifications and mix design requirements for Pervious Concrete as well as contractor and concrete producer certification and experience requirements. Additionally, material strength and durability properties along with maintenance requirements were discussed.

The seminar was presented by Mr. Kenneth M. Justice, PE, LEED AP Senior Director, Local Paving for NRMCA. Ken is one of the few Craftsmen and trainers certified by NRMCA. This seminar was 1 hour long, free to all those that registered and a certificate for one (1) PDH was issued to those that attended.

Looking Ahead

The intent of T&DI is to promote transportation and development as a career path, and to provide training and networking opportunities for all professionals involved in the transportation industry. If you are interested in co-sponsoring a seminar at your branch, the T&DI Louisiana Chapter has prepared a Seminar Coordinator's Check List to assist you in your preparation. Contact Joffrey Easley jeasley@forteandtablada.com for a copy of the checklist. Historically our seminars are two hours in length and are typically presented from 5:30-7:30 pm in either the New Orleans or Baton Rouge areas. Recently our seminars have gone virtual and have been presented mid-day. In keeping with the intent of the Institute to provide training and networking opportunities for all professionals involved in transportation projects, the Chapter is planning the following future seminars:

- Comite Diversion – CMAR Project
- New Mississippi River Bridge – P3 Financing and Tolling
- Asset Management for Agencies
- Mitigation Banking
- Green Infrastructure: Integrating Infrastructure Needs
- Bicycle Lanes / Complete Streets
- New Orleans Armstrong Airport
- Bridge Approach Slabs



ACADIANA BRANCH

By Algy Semien, PE, Branch President

Our goal has been and continues to be to provide quality content while keeping our members safe. Keeping with the theme of 2020 the beginning of this year has been what seems like endless virtual webinars including PDH webinars hosted by the branch for both February and March. While we are grateful that we can provide this service, the routine of it wears on our membership and board of directors. Now with easing restrictions and a vaccine to help fight against the virus we have begun to break the monotony of virtual presentations with in-person events. In April, we held an in-person panel on Leadership Development utilizing "STAY Grant" dollars from the region. This event focused on giving students and young professionals practical information on leadership and early career development along with an opportunity to connect with more experienced professionals. In May, we are having our annual joint crawfish boil with IEEE, as well as a luncheon presentation on the Louisiana watershed initiative's long-term governance structure for Region 5 by the Acadiana Planning Commission.

We have had robust registration responses to our in-person events, as such we will continue to have both in person and virtual events moving forward. Aiming to provide an opportunity to step away from your desks and computers, where you perform your essential duties as engineers, to participate in some of the essential duties of humans in socialization and networking. The Acadiana Branch looks forward to continuing to provide content and events to its members as well as working with our fellow branches in the Louisiana Section to move ASCE forward.

NEW ORLEANS BRANCH

By Andrew Woodroof, PE, Branch President

ASCE New Orleans continues to serve our members in a way that fulfills the Mission, Vision, and Purpose of ASCE. Our goals are to deliver value to our members and advance civil engineering, enable our members to be leaders, and help our members matter more both within our organization and within the engineering community.

To deliver value and advance the profession, we continued with our monthly technical seminars which remain free in virtual format. In February, Mr. Charlie Wildman, PE, of Arcadis presented a case study of levee failure remediation. In March, we hosted the St. John the Baptist Parish Departments of Planning and Coastal Management to educate our members on their vision of a more sustainable Parish. In April, Ms. Meagan Williams of the City of New Orleans provided updates and lessons learned on the City's Stormwater Management Program. Our attendance numbers for these seminars continue to grow, forcing us to evaluate our hosting platform to accommodate more members (a great problem to have!). In the upcoming months, we will continue to host seminars for our members in the technical areas of hurricane storm surge protection and flood risk management. We are in the early planning stages of our annual Fall Conference to be held in late September with our partner organization, ACI Louisiana.

We continue to fulfill the vision of ASCE by empowering our members to be local leaders and build a better quality of life. In March we sponsored the Greater New Orleans Science and Engineering Fair (GNOSEF). We also provided judges for this event and mentored students on their science project execution. We issued a special award at GNOSEF for one student and his sponsoring teacher for an outstanding project in Civil Engineering. In May, our younger members will be participating in the Pontchartrain Conservancy's Storm Sweep, a volunteer event with a two-fold purpose of cleaning the Pontchartrain Basin of litter and debris that could enter the stormwater collection system during storm events and educating the public on the role we play in the health of local waterbodies. Our Outreach Committee continues to seek ways to engage with students and teachers and build the next generation of leaders in civil engineering.

Finally, we continue to fulfill the purpose of our organization to help our members matter more. As an organization, we strive to lift each other as a community of engineers. In April, we held our first in-person networking event since the start of the pandemic. Our members alleviated any concerns we had of managing in-person events by gathering responsibly and enjoyed an evening of networking and comradery at Wrong Iron on the Greenway in New Orleans. Later that month, we held a virtual "ASCE Open House" where members could hear from Branch, Section, and Region leaders as to how they can get more involved in ASCE. Events like these are crucial to identifying the future leaders of our organization and matter more in the engineering community.

As always, we greatly appreciate the support of our members, and I encourage all of you to keep up with the New Orleans Branch through our website, Facebook or by contacting our board directly.

Thank you,
Andrew Woodroof, PE
ASCE New Orleans Branch President

BATON ROUGE BRANCH

By Mary "Molly" Bourgoyne, PE, Branch President

2021 continues to bring hope with COVID-19 numbers coming down, wide vaccine availabilities, and an opening up of in-person offerings. In March, the Baton Rouge Branch conducted a virtual and in-person luncheon jointly with LES. Representative Jack McFarland, LA House District 13, discussed his proposed GRIT Act to be considered in the 2021 Louisiana Legislative Regular Session. Though it has since been abandoned, the GRIT Act sought to rearrange how funding was spent and streamline construction funding. Also at the March 17, 2021 Luncheon, the Branch took the opportunity to highlight the 2020-2021 ASCE Scholarship Winner, Emily Rhone, EI (Fig.1) and the two *Melissa Young Doucet Scholarship* (Fig.2) Winners, Nathalie Dante (Fig. 3) and Huguette "Camille" Abrunhosa (Fig. 3) (not present). The Baton Rouge Branch would like to thank Rhonda Young, who presented the awards for the *Melissa Young-Doucet Scholarship*.

Figure 1. Joshua Olivier, EI, ASCE Scholarship Winner Emily Rhone, EI, and Molly Bourgoyne, PE

The Melissa Young Doucet Scholarship

Figure 2. Joshua Olivier, EI; Melissa Young Doucet Scholarship Winner Nathalie Dante; Rhonda Young; and Molly Bourgoyne, PE

Figure 3. Melissa Young Doucet Scholarship Winner Huguette "Camille" Abrunhosa

In April, we were excited to offer a field trip to LSU! This was an in-person only event with limited numbers due to COVID-19 restrictions. Greg LaCour, RA, LSU Director of Campus Planning and Zachary Broussard, PLA, ASL, Carbo presented on the LSU Mobility Project. The Baton Rouge Branch May Joint Luncheon with LES will also have APWA joining us. June will feature our Annual Past Presidents Luncheon. The Branch also hopes to offer a Bridging the Gap evening event sometime this summer.

The Baton Rouge Branch hosted a virtual seminar for the Annual Spring Conference on May 6 - 7, 2021. Four PDH's plus an Ethics PDH were offered, as well as the Annual General Membership Meeting was held. The ASCE Nationals Candidates joined us for a session regarding the future of ASCE. The Branch appreciates that you could join us!

SHREVEPORT BRANCH

By Linsey Olivier, EI
Branch President

I hope everyone had a wonderful Easter and Spring! The Shreveport Branch had some transitioning of officers recently. Linsey Olivier, EI will be stepping back in as President for the rest of the fiscal year to finish the year with pre-pandemic standards. In January, the Branch hosted a joint webinar with Louisiana Engineering Society, and our guest speaker was Derek Berthelot from Uretek. Derek presented "High Density Polyurethane Grouting", which is used to rehabilitate roadways, runways, bridges, and underground infrastructure using advanced soil stabilization and pavement lifting technology. The Branch February webinar featured Brandon Lomasney with Technical Coating Services and presented "Performance Matters". Our March luncheon was a joint meeting hosted by Louisiana Engineering Society. The topic was on Ethics and featured Mr. Jeff Pike, PE, from Louisiana Tech. Our future luncheons are TBD; however, we are looking forward hosting luncheons at the Petroleum Club very soon! Stay safe and hope to see y'all soon!

ASCE-SEI New Orleans Chapter News

By Mark Castay, PE

Mark Castay, PE

As we start the new year, SEI New Orleans Chapter has been busy at work exploring new topics to bring for our seminars. The first seminar for this year was "Hurricanes Destroy - But Only if We Let Them" by Troy Bishop, PE, GC. The online seminar March 25, 2021 was successful.

This presentation exhibited various types of structural failures incurred by hurricane force windloads, proposed better inspection procedures and retrofits to existing construction that would have saved numerous types of structures.

In this presentation, Troy reviewed structural damages caused by Hurricanes Irma and Michael which were record breaking storms. He explored building collapses by age and type, proposed secrets to strong buildings, and discussed wind engineering and appropriate supporting calculations. Various technical approaches to strengthening the building envelope will be recommended including joist seating and truss strapping to facilitate adequate load path resistance for lateral and vertical loads. Additional topics and their implications to the structural envelope will be suggestedin relation to windows, doors, and impact protection. Inspection of structural damage and recommendations to component modifications will be included in the seminar.

Troy has extensive experience in various areas including product evaluations for notable international manufacturers, post Hurricane Sandy structural evaluations in addition to experience with Miami-Dade Product Control, Florida Building Commission and the Texas Department of Insurance and ICC-ES evaluations. He was the co-author of the American Heating and Refrigeration Institute's 1310P Wind Load Design of HVAC Equipment industry standard. He hasalso authored several articles throughout different publications relating to hurricane wind loads and damage assessment.

The Chapter has several seminars being developed for the 2021 year on various topics which may potentially include "Field Inspection of Reinforcing Steel" and "Emerging Trends-Developments in High Strength Reinforcing Steel and High Performance Concrete" please visit www.asceneworleans.org/events for updates on the future seminars.

Louisiana CIVIL ENGINEERING Conference & Show

SAVE THE DATE!

We are proud to announce the dates for the 31st Annual Louisiana Civil Engineering Conference and Show. This event, a joint effort from the New Orleans Branches of ASCE and ACI, is the premiere gathering for the Civil Engineering community in the Greater New Orleans Area. We are in the process of soliciting sponsors and exhibitors and establishing the technical program for the fall conference which will be held on September 22-23, 2021, at the Pontchartrain Center in Kenner, Louisiana.

For additional information on the conference, please visit our web site at WWW.LCECS.org

Student Chapter News

LOUISIANA TECH UNIVERSITY

By Sydney Bratton, ASCE Student Chapter President

The student chapter here at Louisiana Tech has had a fantastic Spring and end of the year! Throughout this year we have had many virtual and in-person events. At the beginning of this year, we were unsure if we'd get to host some of our typical events, but even with all of the changes we have had a successful year!

Back in the Winter, we were able to host our annual Winter Banquet. We had a lot of fun with this event, and we were glad to see everyone come together. Most recently we participated in the virtual Deep South Conference. Even though we were unable to compete in person, we got together as a team to participate in the events. We had such blast! From the virtual social event to the mystery event and everything in between, this year's conference was one that we will never forget.

Similar to most, this year has looked a lot different for our chapter. Although we couldn't operate like we do on a normal year, we came together as a chapter to make sure that we had the best year we could. No matter what happens in the future, we know that 2020-2021 school year will be unforgettable for our chapter!

MCNEESE STATE UNIVERSITY

By Breanna Cross, McNeese Student Chapter President

ASCE McNeese student chapter has had a rough start this year with not only being hit by an ongoing Pandemic but two major hurricanes as well. Within the last few month McNeese has been working non-stop to restore the buildings and campus facilities for a restored learning experience.

Even with limited campus activities, ASCE McNeese has been able to take part in facility tours of Alfred Miller Contracting and Dunham Price. At Dunham Price Pre-stressed facility, our student chapter was able to gain insight on the construction and the process of pre-stressing various members such as a double T-beam. We were able to watch a T-beam mold be prepped with rebar and filled with concrete. At Alfred Miller Contracting our student chapter was able to gain insight on pre-cast members, pile caps, and concrete mix design. Here we gained insight on an aggregate alternative for flyash called slag. This aggregate is a cheaper aggregate that produces the same result as fly ash; therefore, our student chapter is looking into using this aggregate instead of flyash in our concrete mix design for our canoe.

In April our student chapter participated in a joint event with UL. We were able to gain insight from a board of ASCE members while having the opportunity to connect and network. Lastly, our student chapter and UL's student chapter volunteered for a cleanup event in the Lake Charles and Sulphur area to help those still affected by the hurricanes. The host organization was PickItUpCalcasieu and was held in the beginning of May 2021.

With the several setbacks taken on this year, our ASCE student chapter is holding our heads high as we march ahead into the recovery of our campus and city. We have persevered through the hardships and are excited for the future.

UNIVERSITY OF NEW ORLEANS

By Andrey Romanov, Student Chapter Secretary

Although most of the on-campus activities hosted by ASCE UNO were not held due to the pandemic, we had quite a successful meeting in April, whenever the US Army Corps of Engineers came and gave a presentation on the organization and possible career opportunities within it. With all the proper safety precautions in place, UNO students had a chance for a free lunch along with a very interesting presentation given by USACE. While the turnout was small compared to similar meetings held pre-pandemic, we are excited to be back on campus and look forward to hosting a lot more of those events in the future.

We are currently in the process of electing a new ASCE board, and we plan to announce the results on May 15, 2021. Challenges/ opportunities for the upcoming board include getting the regular routine back in place, such as selecting and organizing teams for competitions, providing regular student outreach, and host-on campus events. Since our chapter has not participated in the past two Deep South Conference events, it will be important to reach out to students, staff, faculty, and alumni who have had experience with those events to help guide the teams in the right direction.

UNIVERSITY OF LOUISIANA LAFAYETTE

By Peyton Bailey, ASCE Student Chapter President

At the start of the Spring semester our chapter began planning for several upcoming events but were cautious about planning large events due to COVID-19 restrictions. However, we were able to hold a general meeting to recruit younger students and gain more involvement in our student chapter.

Our student chapter members worked hard in preparation for several competitions in the Deep South Conference including the Concrete Canoe Competition, Steel Bridge Competition, Sustainable Solutions Competition, and Blue Sky Innovation Competition. It was exciting that despite the pandemic, we were still able to compete.

As of now, we have submitted our technical proposal for the Concrete Canoe Competition and are awaiting feedback. We also decided to demold the canoe from the 2020 competition that was cancelled. Although we were never able to compete, we are proud that all the hard work we put in has turned out successful.

We recently completed and submitted our technical proposal for the Sustainable Solutions Competition "Parks and Recreation" Challenge. We also completed the Steel Bridge Competition. Local judges came to our campus to witness the team building the bridge.

Unfortunately, due to a faulty bolt connection in one of the cross bracings, the bridge was disqualified. We were allowed to load the bridge despite our disqualification and were disappointed to see it fail at approximately 90% load. The team learned that we did not provide enough lateral bracing at the top of the stringers. Although we were disqualified from the competition when the bridge collapsed, we have learned from our mistakes and are excited for next year's team to build on our lessons learned.

Before the end of the semester, we will be having an officer election for the upcoming school year.

Figure 1: 2021 Steel Bridge Competition Assembly Team (from left to right): Seth Benoit, Tanner Shaddox, Josh Fontenot (Captain), and Vertrell Harris

SOUTHERN UNIVERSITY

By Jelani Smith, Student Chapter President

The Southern University Student Chapter of ASCE has participated in community service work throughout the Greater Baton Rouge Area, such as the Household Hazardous Waste Disposal Days (HHWDD) for EBRP. The volunteers for HHWDD work alongside the EBRP Department of Environmental Services, Recycling Office to dispose of potentially dangerous materials that cannot be disposed of in normal waste, such as batteries, paint, and cleaners. In addition, the SU Student Chapter hosted guest speakers from Walter P. Moore and Associates, Inc. to give students a better insight on life past undergrad and better insight on working as an engineer through a pandemic. Southern University College of Engineering featured "Generations of Southern University engineering graduates that work with NASA on major projects".

Generations of Southern University engineering graduates work with NASA on major projects

By Southern University Office of Communications

"You are the future… The next generation of great engineers," said former NASA engineer Morgan Watson to a group of young Southern University engineering graduates. Also, an engineering professor at Southern, Watson addressed a group of five engineers currently working to support the NASA Space Launch System at the Michoud Assembly Facility in New Orleans. The mixed generations of engineers convened at a small reception held in late October 2020 in the atrium of the College of Sciences and Engineering. Watson shared his experience as one of the first Black people to help integrate the Marshall Space Flight Center as a Southern University Engineering Cohort. After graduating in 1964, Watson went to work as a NASA engineer on projects like the Apollo Lunar Missions. Just four years later, the Apollo 8 Mission of 1968 was the first space flight to carry a man to the moon.

Today, the legacy with NASA continues as Southern recently became the first historically Black university to sign a NASA Mentor Protégé Agreement with Boeing. "This agreement positions Southern as a supplier to provide engineering services throughout NASA, increasing the university's capacity to compete on federal contract opportunities," said Samuel Washington, director of the university's Office of Governmental Contracting Services. "The Boeing partnership helps to showcase our capabilities and provide a labor force of highly trained engineering graduates."

According to Michael Stubblefield, vice chancellor for research and engineering alumnus, federal contracting is a $10 billion industry and has great opportunities for Historically Black Colleges and Universities, and Minority Serving Institutions. "For universities alone, it is pivotal for our schools to increase their contracting capability, capacity, and infrastructure, to compete for these astronomical opportunities," he said. "The university is extremely proud of these graduates and the work that they are doing to support Boeing and NASA in this extremely critical mission."

Deanna Smith, event organizer and director of strategic engagement, reiterated to attendees that they are part of a profound legacy. "We are standing in a room full of greatness," she said. "From Apollo to Artemis, Southern University has helped to take men to the moon, and now our graduates will help to take them to Mars."

Figure 1. Back row left to right: Boeing engineers Henri Hammond, Cordal Poole, Reginald Boutte, Cedric Cole and Lorenzo Phillips. Front row from left to right: Morgan Watson, Southern University professor of mechanical engineering and former NASA engineer, and Patrick Mensah, professor and associate dean for the Southern University College of Sciences and Engineering

LOUISIANA STATE UNIVERSITY

By Denzel N. Flores, EIT

The first quarter of the ASCE Student Chapter at LSU gained a steady crowd during our weekly zoom meetings on Wednesday nights. The Chapter raffled ASCE t-shirts to those who attended and began our meeting with "Fun Five – Question Quiz" on varying topics such as FE exam questions, bridge names, and structure names. The members had their cameras and microphone on for an interactive social with each other, learning about the history of Civil Engineering and global CEE facts. It was very encouraging to see members participating and engaging socially during the short social each week.

Joey Coco, PE, Vice President of Forte & Tablada presented at the first meeting. The Student Chapter members found Coco's topic on "Advanced Measurements Used in the Field" very interesting and asked many questions. The Chapter's second meeting was preparation for the Career Fair, which 20 zoom members attended (Fig 1).

Next, the Chapter had a graduates meeting featuring Emily Rone, EI and David Fuller who were great Student Chapter members last year and are still helping facilitate our events like the Deep South Conference and Bayou Regional Career Fair. Our next meeting explored CEE activities and organizations for students to participate in, which had an audience of 20 people (Fig. 2).

Our meeting with Dr. Moorthy about scheduling and advising had 14 students and our social/movie night last week had 12 students. The last two meetings we had with Freese & Nichols and Jones & Carter had an option for in person meeting for those who want to have interactions with fellow members. This semester started out strong with new and returning members and ended greatly! Planning for next semester is underway.

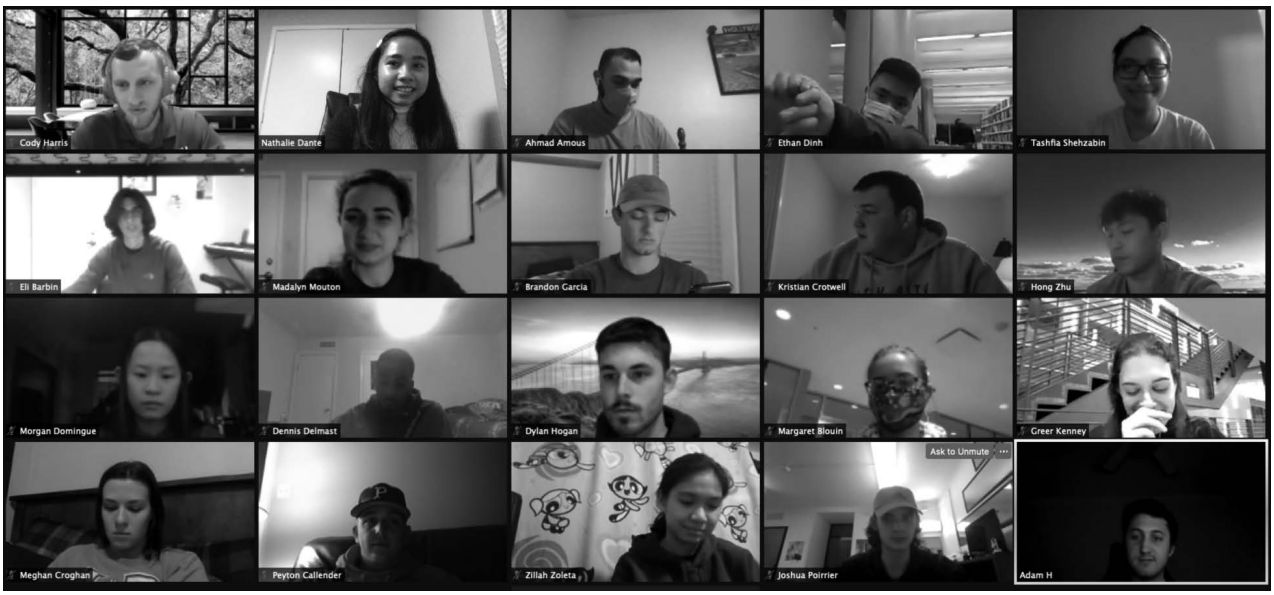


Figure 1. LSU Student Chapter Meeting for the Career Fair

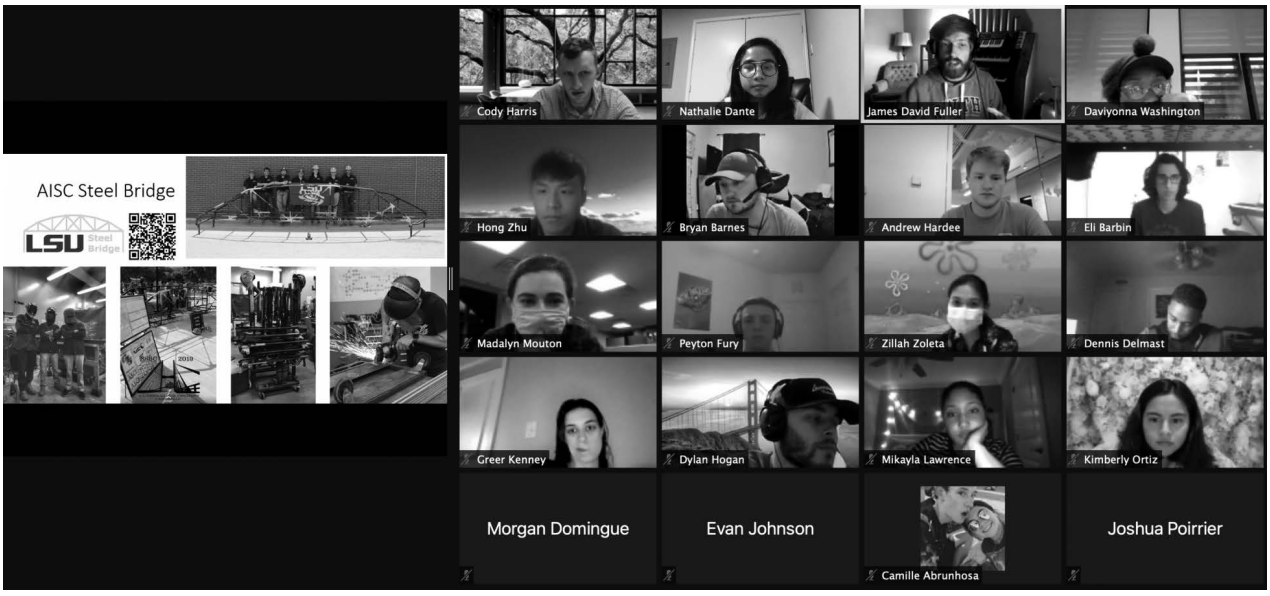


Figure 2. LSU Student Chapter Activities and Organizations Meeting

— CALENDAR OF EVENTS —

2021

October 6-9, 2021 - Annual Convention (Chicago, IL)
Due to the ongoing effects of COVID-19 around the world, and the health and safety of attendees, ASCE has reached the difficult decision to cancel the in-person **ASCE Convention 2021** in Chicago and hold the event virtually **Oct. 6-8, 2021**. More information will be coming soon, and registration is scheduled to open in late June.

Events are constantly being updated online:

For ASCE Society events please see online:
https://www.asce.org/conferences_events/
https://www.asce.org/student_conferences/

For ASCE Baton Rouge events please see online:
http://branches.asce.org/baton-rouge/events

For ASCE Shreveport events please see online:
https://www.facebook.com/ASCEShreveport/

For ASCE Acadian events please see online:
http://branches.asce.org/acadiana/events

For ASCE NOLA events please see online:
http://asceneworleans.org/events/

For more events visit the ASCE Events Calendar: **http://www.lasce.org/calendar.html**

PROFESSIONAL LISTINGS

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