PE MATTERS STATE NEWS

NSPE-NV NEVADA SOCIETY OF PROFESSIONAL ENGINEERS

>>>> MAY 2022

State News for NSPE Members

The 2022 NSPE-NV Engineers Week Finale Banquet

NSPE-NV wants to thank everyone who attended the recent **National Engineers Week Finale Banquet** and made it a success! More than 300 gathered on Saturday, May 7, at the Gold Coast Hotel and Casino for the Alice in Wonderland themed event. NSPE President-Elect Britt Smith, P.E., F.NSPE, and his wife attended as honored guests.

The event kicked off at 5:00 p.m. with the Order of the Engineer oath with 10 new inductees, followed by a cocktail hour and dinner. The night's festivities also featured a program to announce scholarships, awards, and door prizes. And we mixed in an escape room puzzle! The fun didn't stop there—the DJ made sure the after party was entertaining while attendees captured lasting memories in the photobooth.

We would like to thank all of the financial sponsors for the evening. And a special thanks for the EWeek committee for putting on a great event!

Award Winners

NSPE-NV™

ENGINEER
OF THE YEAR

BOB THOMSEN, PE

NSPE-NV™

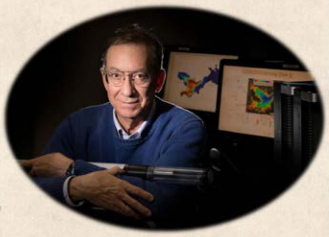
YOUNG
ENGINEER
OF THE YEAR

CHRISTIAN
HERRERA, PE

NSPE-NV™

RAMONA LESLEY
DISTINGUISHED
SERVICE AWARD

DR. DAVID JAMES,
PE, F.NSPE



NSPE-NV™

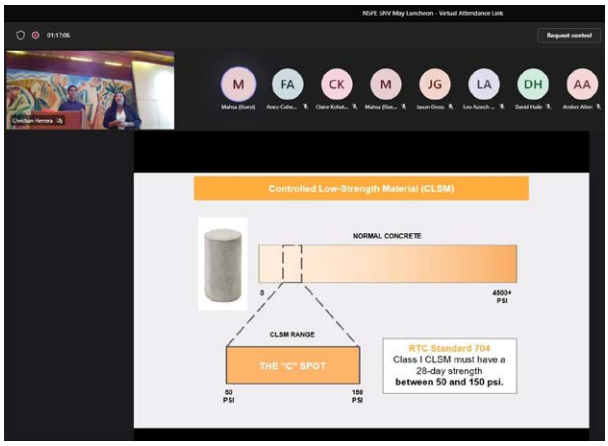
PROJECT
OF THE YEAR

SNWA LOW LAKE LEVEL
PUMPING STATION

NSPE-NV Meeting Recap—Senior Engineering Design Projects

On May 17, NSPE-NV held an in-person/virtual meeting to highlight two engineering senior design projects of University of Nevada (Las Vegas) students.

Project One: The "C" Spot—Evaluating CLSM Test Methods and Behaviors
Controlled low-strength material (CLSM) is low-strength concrete (between 50 to 150 psi) used as a cost-effective alternative to compacted natural soil. Industry and inspectors use different methods for compressive strength testing, resulting in widely varying strengths. When CLSM is outside of its low-strength range, it must be torn out, resulting in time and cost delays in construction. The "C" Spot evaluates three moulding methods (masonry block, grout box, and split cylinder), three capping methods (gypsum, sulfur, and neoprene), and studies the behavior of CLSM with relation to depth to evaluate the performance of current testing methods.



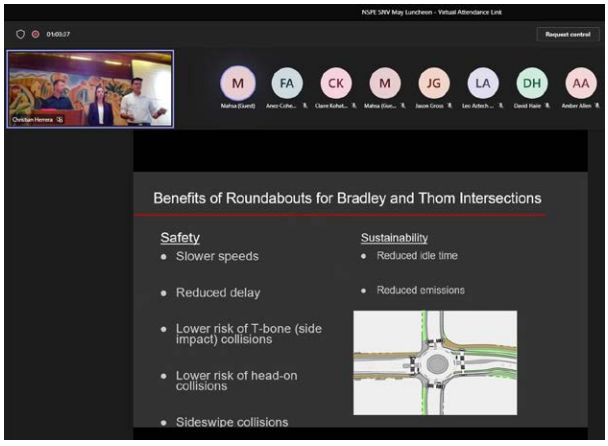
Meet the Presenters—Justin de Leon and Megan Taylor Agbayani

Justin de Leon is a civil engineering major and a project associate at Perlman Architects. He is the past president of Institute of Transportation Engineers' UNLV student chapter and was responsible for rechartering the chapter after 10 years of inactivity. His previous internship experiences were at D.R. Horton and Toll Brothers, where he has developed a passion for home building and construction.

Megan Taylor Agbayani is a civil engineering major. Her past internship experience was at Kimley-Horn and Associates, and she is planning on joining their solar team this fall as a civil analyst in their Las Vegas office. She is looking forward to playing an important role in many renewable energy projects across the country. During her free time, she is an avid reader, singer, and traveler.

Project Two: West Alexander Complete Street Redesign

The objective of this senior design project was to redesign West Alexander Road between Rancho Drive and Decatur Boulevard into a roadway that is safer for its nearly 6,000 daily road users, uniform between urban and rural sections, and functional for all modes of travel. The project scope included research of existing conditions and prior market solutions, alternative evaluations, and a final design with a proposed cost and schedule. The final proposed design is a complete street design that includes uniform vehicular lanes, sidewalks, bike lanes, and equestrian paths. The design also includes traffic-calming measures such as a lateral shift and raised medians, drainage infrastructure to reduce flooding during storm events, and roundabouts at the two major intersections to reduce travel speeds and minimize crash risks. The implementation of this final complete street design would transform West Alexander Road into a safe, accessible, and sustainable roadway.



Meet the Presenters—Gustavo Mendez, Bryan Oxborrow, and Hannah Singleton

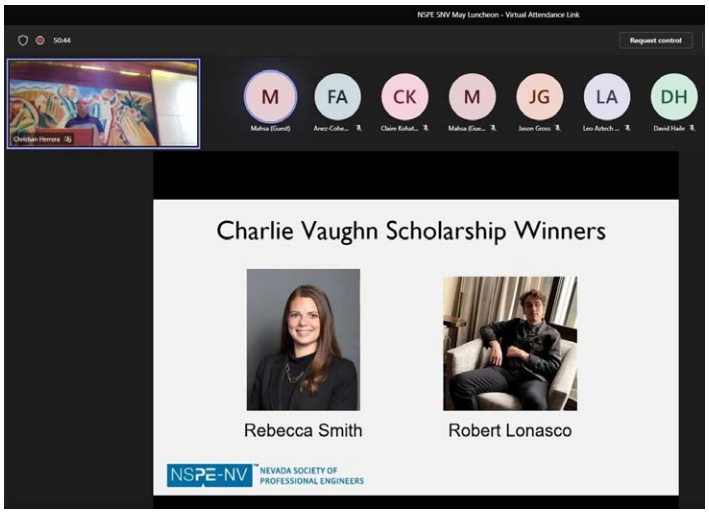
Gustavo Mendez is a fresh graduate with a bachelor's degree in civil engineering. During his time as a student, he has gained a diverse experience through internships in the fields of surveying, structural engineering, materials testing, and residential land development. Mendez will be transitioning from an internship to a full-time position at Westwood Professional Services in Las Vegas.

After graduating with a bachelor's degree in architecture, Bryan Oxborrow furthered his education of the built environment and recently obtained a bachelor’s degree in civil engineering. During his studies, Oxborrow has progressed his career in engineering and has experience in commercial land development, surveying, utility coordination, and structural engineering. He now works as a full-time project manager involving overseas projects in the telecommunications sector managing drawing production from conception to completion.

Hannah Singleton is a recent graduate with a bachelor's degree in civil engineering. She spent time in her undergraduate career interning with the Southern Nevada Water Authority where she found her passion of working in the water/wastewater industry. Singleton also performed undergraduate research studying the effects of thermal shock on the compressive strength of mortar and worked as a peer mentor in the UNLV College of Engineering. She looks forward to starting her engineering career this summer and starting a master's degree program in civil and environmental engineering this fall.

Scholarship Winners

The winners of the **Charlie Vaughn Scholarship** were also recognized during the meeting. Rebecca Smith and Robert Lonasco, III, will both receive $1,500.



Rebecca Smith is pursuing a bachelor in civil Engineering with a concentration on environmental/water resources at UNLV. Her personal interests have driven her passion for developing and integrating an expansive knowledge of the diverse perspectives and practices within the engineering field. By getting involved with organizations like "Learn to Be Civil," Rebels Forward, and, of course, NSPE, these aspirations have started to become a reality.

Smith's academic journey has given her not only the opportunity to learn, but also the opportunity to grow through community service, international design competitions, and professional mentorship. She is excited about what the future holds as she seeks to become an integral part of innovative solutions that serve the needs of our community and our world!

Robert Lonasco, III, is a third-year computer engineering major at UNLV. He is currently involved in the Las Vegas Scholars Program, a selective academic assistance organization and research study for computer engineering and computer science majors. He is a UNLV Tau Bate in the Nevada-Beta chapter.

This summer, Lonasco will be a software engineering intern at the Remote Sensing Laboratory at Nellis Air Force Base with Mission Support and Test Services, a Department of Energy contractor that manages the Nevada National Security Site. Last summer, he conducted research with UNLV's Office of Undergraduate Research; thus, he explored deep learning solutions on a Xilinx field-programmable gate array (FPGA) platform. Lonasco's hobbies and interests include: hiking, swimming, video games, music, collecting vinyls, and building gaming PCs!

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NSPE-NV Outreach in Action

David James, Ph.D., P.E., F.NSPE, Mahsa Ghazian Arabi, Ph.D., P.E., and Brook Demitropoulos, P.E., attended the Nevada NASA EPSCoR statewide meeting where they presented the NASA Lander activity to in-person and virtual attendees on April 29.

Participants work on their designs.

David James tests a design.

David James gives thumbs up to the astronauts landing safely.

Upcoming Volunteer Opportunity
The Just One Project will be hosting its latest **Pop Up & Give Mobile Market** on **Saturday, May 21**, in multiple locations from 7:45 am – 11:00 am
If you would like to participate in this volunteer opportunity, you can sign up online. Please wear comfy closed toed shoes and bring water. Children 10 and older are welcome to participate.

NSPE's **Job Board** is your one-stop resource for professional engineering employment. Whether you are on the hunt for your next career move or looking for today's top engineering leaders and talent, you will find it here.

NSPE provides the tools PEs need to keep current in the profession and advance their careers.

Featured Job
Public Works Director
Boulder City, NV

Find more job openings or reach the right employees on the NSPE Job Board.

*Stay up to date on legislative issues through the **NSPE Advocacy Center** .*

Register Now for NSPECon 2022 Reimagined

Engineers from all disciplines are invited to register for the 2022 NSPE Professional Engineers Conference (NSPECon 2022) in Philadelphia, August 1-3. Invited speakers will address sustainability, emerging technology, the post-covid workplace and even, construction on the moon. Whether you are a licensed professional engineer, aspire to be one or, would like to learn more about a career as a qualified and ethically accountable professional, you are invited to join this multi-discipline community to engage with colleagues and hear more about relevant engineering topics.

Prospective conference sponsors and exhibitors will see newly created opportunities to highlight their companies and organizations throughout the conference. Sponsors can welcome attendees to the “Feel the Philly Love” opening reception, support a conference education track featuring seven unique sessions, or demonstrate how their solutions help clients overcome specific challenges by exhibiting.

On the final day of the conference, attendees can celebrate PE Day in person and raise awareness about the importance of PEs as qualified and ethical professionals. Before you go, make certain you are geared up with PE Day logo wear to show your pride on-site.

2022 QBS Award Nominations Open

ACEC and NSPE are seeking nominations for the QBS Awards program , which recognizes public and private entities that make exemplary use of the qualifications-based selection process at the federal, state, and local levels.

Award winners serve as examples of how well the QBS process works , and they help ACEC and NSPE promote the practice of QBS in jurisdictions that do not use, or underuse, QBS to procure engineering services. A maximum of one QBS Award may be presented to the federal government sector, the state government sector (includes all governmental units under the state level), and nongovernment sector.

Nominations may originate from an ACEC member organization, an NSPE state society, a public or private entity, or an individual in the public or private sector. Self-nomination is not permitted.

Nominations and supporting materials are due by **Friday, June 17** (COB). Access the nomination form and instructions .

Scholarships Open for Applications

The Swadesh and Om P. Popli, P.E., P.L.S. Scholarship and the William R. Kimel, P.E., Engineering Scholarship are accepting applications from students pursuing engineering degrees in the fall. The application deadline is **June 15**.

The Swadesh and Om P. Popli, P.E., P.L.S. Scholarship is a multi-year scholarship that will provide $5,000 each year of the recipient's four-year education. Applicants must be a female high school senior from an underrepresented ethnic minority (African American, Hispanic, Native American, or Pacific Islander) pursuing a degree in civil, electrical, or mechanical engineering at an ABET-accredited program.

The William R. Kimel, P.E., Engineering Scholarship is a $2,500 scholarship awarded annually to an undergraduate student who is a resident of either Kansas or Missouri and enrolled as a junior in an ABET-accredited engineering program in a college or university in either Kansas or Missouri.

National Society of Professional Engineers | 1420 King Street | Alexandria, VA 22314