

## State News for NSPE Members

### WV Infrastructure Website Gets Upgrades

Governor Jim Justice recently announced major upgrades to the state's comprehensive infrastructure website to give Mountain State residents complete access to the state's plans and accomplishments under the federal Infrastructure Investment and Jobs Act (IIJA).

West Virginia is expected to receive \$7 billion in federal funding between 2022 and 2027 through the IIJA, perhaps the largest federal infrastructure investment program in history.

"We have a ton of infrastructure projects already going, with more on the way," Governor Justice said in a [news release](#). "This website is the most accurate and transparent way for people to keep track of how federal dollars are being spent on those projects around the state. There is a lot of money rolling into West Virginia right now, and this is how you can keep track of how it is being used for you."

The [West Virginia Infrastructure Hub](#) is designed to efficiently distribute IIJA funds throughout the Mountain State. The website aims to ensure that the historic investment in infrastructure is distributed to where it is needed most.

In the coming months, a statewide fund tracker tool will be rolled out to facilitate coordination among state and local agencies and economic development representatives, provide technical assistance and training, and support local communities across the state to secure federal funds through the IIJA, the Inflation Reduction Act (IRA), and CHIPs funding. [Read more.](#)

---

### Professor Investigates Drinking Water Quality in West Virginia

A West Virginia University engineer is working to solve the unknowns about microorganisms growing inside pipes that bring drinking water to homes and businesses in West Virginia.

Supported by an award of \$505,784 from the National Science Foundation, professor Emily Garner has launched a five-year study to learn more about biofilms, [the West Virginia Explorer reports](#). Known as “cities of microbes,” biofilms are conglomerations of fungi, algae, bacteria, and other single-celled organisms that cling to each other and to surfaces like the insides of water pipes, where they become coated in a protective slime.

“Many things influence how biofilms grow in drinking water distribution systems—water chemistry, the presence of disinfectants like chlorine, and the forces exerted as water flows through pipes,” said Garner, who is an assistant professor in the university’s Wadsworth Department of Civil and Environmental Engineering at its College of Engineering and Mineral Resources.

“But past research about biofilms doesn’t account for the complexities of varied flow conditions in different parts of a water distribution system,” she said. “These systems can consist of hundreds of miles of buried pipes, so ensuring the chlorine disinfectant hasn’t decayed by the time it reaches all parts of the system can be a challenge.”

Garner’s lab will develop strategies for maintaining water quality throughout these complex infrastructures and offer recommendations to managers of drinking water distribution systems. The research also includes an outreach and educational component that will bring K-12 students across West Virginia hands-on activities about water treatment and information about water sector careers. [Read more](#).

---

## WVU Launches New Environmental Engineering Degree Program

[West Virginia University has announced](#) that students interested in creating a sustainable environment will now have new degree options to consider with the launch of an undergraduate Environmental Engineering program at the Benjamin M. Statler College of Engineering and Mineral Resources.

This new degree program in the Wadsworth Department of Civil and Environmental Engineering will utilize the principles of engineering, soil science, biology, and chemistry to develop solutions to environmental problems.

“The Statler College is in a strategic position to offer this new degree program to prepare workforces to address regional and global environmental and public health problems,” said Lian-Shin Lin, professor in the Wadsworth Department.

The program allows students to choose from different areas of emphasis, including water supply and resources; water quality engineering for human society; air pollution, control, and climate change; and environmental health, risks, and public

health.

To incorporate real-world training for students, faculty are building a network of industrial partners that include engineering firms, municipalities, nonprofit organizations, and government agencies.

The new major will be the fifteenth Statler College undergraduate degree offered at WVU. Other engineering programs include aerospace, biomedical, biometric systems, chemical, civil, computer, engineering technology, electrical, industrial, mechanical, mining, petroleum and natural gas along with computer science and cybersecurity. [Read more.](#)

Stay up to date on legislative issues through the [NSPE Advocacy Center](#).

---

## Meet the 2023 NSPE Emerging Leaders



NSPE is pleased to recognize 15 talented professionals who recently completed the Society's [Emerging Leaders Program](#). This diverse group of young professionals was selected from around the country to take part in an intensive, unique enterprise designed to equip them as leaders in the engineering field.

- **Nicholas J. Bailey, P.E.** (Cincinnati, Ohio)
- **Frank Block III, Ph.D., P.E.** (Silver Spring, Maryland)
- **Timothy Choma, P.E.** (Iselin, New Jersey)
- **Courtney Cunningham, P.E.** (Houston, Texas)
- **Steven T. Fox, P.E.** (Nashville, Tennessee)
- **Blane Gee, P.E.** (Oklahoma City, Oklahoma)
- **Holly Hartley Guillaume, P.E.** (Katy, Texas)
- **Lingbee Chyna Lim, P.E.** (Charleston, South Carolina)
- **Brianne R. Jole, P.E.** (Lubbock, Texas)

- **Corey Kingsland, P.E.** (Kansas City, Missouri)
- **Carter Lytal, P.E.** (Lubbock, Texas)
- **Rebecca Martinez, P.E.** (Cherry Hill, New Jersey)
- **Alissa Neuhausen, P.E.** (Rockville, Maryland)
- **Victor Odili, P.E.** (Conroe, Texas)
- **Skylar Wierzbicki, P.E.** (Grapevine, Texas)

The program is [accepting applications](#) for the next class of rising leaders until August 31.

---



The upcoming [Professional Engineers Day](#) (Wednesday, August 2) is an incredible opportunity to showcase the value of NSPE and your PE license. We encourage you to post on your social media accounts a highlight from your community, your work, your impact, your story and include the #IAMNSPE, #WeareNSPE, #ProudPE.

NSPE's [apparel shop](#) features the PE Day logo on a variety of items including many styles of t-shirts and other apparel for men, women, and kids, as well as accessories like mugs, notebooks, tote bags, wall prints, and even phone cases. [Shop now.](#)

---

## Check Out the Latest Issue of *PE*

### [The Chatter About AI](#)

OpenAI's ChatGPT came on the scene in November 2022. This type of generative AI has made a noticeable impact in a brief period of time and other versions of chatbots have been released. This emerging technology is sparking discussions about what impact AI could have on the engineering workforce and in engineering practice.



### Reaching Tomorrow's Innovators

DiscoverE has released its latest research on the views of high school students and parents on engineering and engineering careers. The Messages Matter results were encouraging as they reveal that targeted messages and profiles of engineers can spur interest in engineering among the very groups that will ensure a more diverse future for the field.

Members who subscribe to the [digital edition of PE](#) can access the current and back issues.

You received this e-mail because you are subscribed to *PE Matters* e-newsletter.

To update your e-mail address, visit [www.nspe.org](http://www.nspe.org) and login to manage your account.

If you do not wish to receive any more issues of *PE Matters*, [click here to unsubscribe](#) .

### Share with your network



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