

## State News for NSPE Members

### West Virginia Gets \$18 Million for Broadband Improvement Projects

Governor Jim Justice recently announced the preliminary approval of more than \$18 million for various broadband infrastructure projects throughout the state. This announcement includes applications received under the programs Line Extension Advancement and Development, Major Broadband Project Strategies, and Wireless Internet Networks (WIN).

The programs are branches of the governor's [Billion-Dollar Broadband Strategy](#) – a plan to invest over \$1 billion in state and federal funds to make broadband connectivity available for the first time to 200,000 West Virginia homes and businesses.

The announcement marks the first preliminary award made for the WIN program which covers state parks and forests by expanding wireless technology. Under the WIN program, funding will allow upgrades to the three towers with 5G and mid-band wireless technology to bring high-speed reliable connectivity to Coopers Rock State Forest, Watoga State Park, and the surrounding areas, significantly increasing public safety and elements of tourism. [Read more.](#)

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### WVU Researcher Explores Ways to Modernize Road Maintenance

Motivated by extreme weather events, one West Virginia University researcher is looking to emerging technologies to reimagine how state and city agencies might maintain roads and other transportation networks, according to [West Virginia Explorer Magazine](#).

Kakan Dey's expansive research will delve into a variety of ways a data-driven approach can enhance roadway maintenance operations — from modernizing maintenance vehicle fleets and rethinking the placement of operational hubs to utilizing artificial intelligence that analyzes real-time information collected by

sensors on consumer cars or at roadside observation stations.

With funding from a prestigious, highly competitive \$540,000 National Science Foundation CAREER award, Dey, an associate professor at the WVU Benjamin M. Statler College of Engineering and Mineral Resources, will consider how to transition to all-electric maintenance fleets and how to handle maintenance operations in scenarios in which real-time data streams in from sources such as “connected vehicles,” or automobiles that can transmit data about road conditions.

Dey will also transform case studies from the research into educational activities for K-12 and higher education students and provide continuing education opportunities to transportation network maintenance professionals, with particular attention to engaging underrepresented groups. [Read more.](#)

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## WVU Engineering Program Gets \$599K Boost

US Senator Joe Manchin recently announced \$599,999 in funding for an engineering education research project at West Virginia University. The funding comes from a grant from the US National Science Foundation, [WVPB reports](#). The project involves examining different learning techniques in engineering curricula to improve student performance and improve retention rates in associated academic fields.

Manchin said the engineering education research project will bolster academic success and help retain students in the engineering disciplines.

The US National Science Foundation is an independent federal agency that promotes science and engineering in all 50 US states and territories. Investments account for around 25% of federal support to colleges like WVU for basic research.

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

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## Connect with Your Colleagues at #NSPECon23



Register now for NSPECon23 and connect with your colleagues in Louisville, Kentucky, August 2-4. The conference [features multiple education tracks](#) in leadership, trends in the industry, and career development with the opportunity to earn up to 10 PDHs. Also stay tuned for information on engineering-related tours. **Register by June 29 to take advantage of discounted rates.**

**Register Now!**

### Keynote Speakers

**Bill Samuels, Jr.**, Chairman Emeritus of Maker's Mark Distillery, will open the NSPECon 23 meeting. Samuels, who helped design both the Gemini and Polaris missiles and became friends with the founding administrator of NASA, will talk about the, ["Trials and Tribulations of a Failed Aerospace Engineer."](#)



**Megan Bendtzen**, the CEO and founder of TheDoctorofFun.com, will give a keynote presentation on - [Beyond the Blueprint: Mastering the Most Important Project of Your Life](#) . In this clever and entertaining presentation, Bendtzen will completely shift your perspective, debunking the myth of work-life balance and revealing the single biggest lie surrounding the pursuit of happiness.



### Conference Session Highlights

- [Ethical Obligations and Engineering Through a DEI Lens](#)
- [The Engineer's Blueprint: Success Principles for Winning at Work and at Home](#)
- [Lithium: The Race for North American EV Dominance But at What Cost to the Industry?](#)
- [Finding the Funds for Your Infrastructure Project](#)
- [Leaders Leading Leaders](#)
- [We Need YOU to Protect the License!](#)
- [Meeting the Challenges and Needs of The Engineering Workforce](#)
- [Speculative Technology and Exploratory Engineering for Designing the](#)

[Access the full conference program.](#)

### Sponsor and Exhibitor Opportunities

NSPECon23 offers sponsorship and exhibitor opportunities to put your company or organization in front of senior executives and other decision-makers from across the industry. Access the [Sponsor and Exhibitor Prospectus](#) for more information.



### New Webinar: Racing Towards Excellence

A new webinar will get you ready for NSPECon23 — [Racing Towards Excellence: Enhancing Customer Experience and Improving Safety at Churchill Downs](#) .

Neil Crawford, P.E., an accomplished engineer and project manager at Qk4 Inc., offers insight into the history of Churchill Downs and the Kentucky Derby and its economic impacts on Kentucky. Learn about recent improvement projects to enhance the customer experience and also projects to improve equine/horseman safety and expand the racing operations.

The webinar is FREE for members and offers 1 PDH. [Register and watch now](#) .

The image is a promotional poster for a webinar. At the top, it says 'PE INSTITUTE' with 'EDUCATION FOR PROFESSIONAL ENGINEERS' underneath. The main title is 'Racing Towards Excellence: Enhancing Customer Experience and Improving Safety at Churchill Downs'. Below the title, it says 'AVAILABLE ON-DEMAND' and 'PDH.NSPE.ORG'. There is a circular portrait of a man, Neil Crawford, P.E. Below the portrait, it says 'NEAL CRAWFORD, P.E.' and 'QK4 INC. AND PRESIDENT, NSPE-KY'. At the bottom, it says 'FREE TO NSPE MEMBERS - Part of the WORKability Wednesdays series'.

## ARPL Offers New Advocacy Resources

ARPL has released two new advocacy resources. A video, [Universal Licensing: A Closer Look](#), (featuring Rebecca Bowman, Senior Director of Ethics and Professional Practice) and an advocacy document, [The Critical Role of Licensing in Business Success](#), based on recent research. As a sponsoring member of ARPL, NSPE has access to these resources and others on the [ARPL website](#).

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