State Infrastructure Driving Business

Infrastructure for industry took on new importance in 2021. Natural gas, electricity, drinking water and waste removal, often taken for granted, got noticed this year. Unprecedented spring freezes changed the anonymity as vast swaths of the nation went cold and dark.

Even young Arizona, the third-youngest US state, sees its cities replacing century-old pipes under the streets in the original city cores.

"We started investing in the infrastructure of the future about 10 years ago," said Bill Jabjiniak, economic development director for Mesa. "It was a controversial move at the time putting in fiber, improving roads and getting power, sewer and water to an essentially undeveloped area. Now, new construction is starting all the time along Elliott Road because it's 'shovel ready.'"

Mesa is not alone. Torn-up streets across the Valley mean cities and private utilities are updating underground infrastructure. The electric companies are consistently adding lines to power Arizona’s growing and expanding industries.

"Whether it's infrastructure or energy, businesses are looking for reliability," said Sandra Watson, president and CEO of the Arizona Commerce Authority. "Arizona was recently ranked as having the second most reliable energy grid in the country. When you pair that with our abundant renewable energy and modern highways, airports, rail, ports of entry and public transportation, Arizona stands out as an ideal location for doing business in the global economy."

Read more in the Phoenix Journal.

Arizona Tech Council Applauds 2022 State Budget

The Arizona Technology Council applauds the state’s fiscal year 2022 budget package proposal. This budget invests dollars and directs policy that will support
economic success and growth for many programs of immense importance to Arizona's technology sector.

"Arizona is growing at an incredibly fast pace, especially in technology-related fields, and this budget will ensure Arizona maintains and accelerates its competitiveness on a global scale while making substantial payments towards the state's debt and giving Arizonans a tax cut," said Steven G. Zylstra, the council's president and CEO, in a statement. "The Arizona Technology Council thanks Governor Ducey and the Legislature for including the council's key education, infrastructure and tech-focused priorities in this proposal, and encourages members to support these provisions in the final budget package."

Key council priorities funded in this budget package proposal are

- Increased funding for universities, including $130 million in new higher-education investments.
- Restoration of fourth-year Career Technical Education District (CTED) funding.
- An additional $50 million appropriation for the Arizona Competes Fund.
- $2.5 million for a Dark Skies Discovery Center.
- $140 million dedicated funding for broadband infrastructure across the state, with an emphasis on rural Arizona.
- Reduction in the Class 1 commercial property tax assessment ratio from 18% to 17% over two years.
- Investment in Arizona's highway infrastructure to support commerce.
- K-12 education investments, including new school construction, a building renewal fund, full funding for district and charter assistance, and the provision of gap funding for schools and students to address school budget issues that arose during the pandemic.

Empower STEM Program Creates Student Pathways

University of Arizona associate professor Erin Ratcliff was fascinated by the work she did as a faculty fellow at the Naval Research Lab in 2017 and again, remotely, in 2020. She wanted her engineering students to see the possibilities of similar positions.

"NRL has cutting-edge, amazing equipment and capabilities, and they have a lot of it," said Ratcliff, an associate professor of chemical and environmental engineering in the UArizona College of Engineering. "They're doing all kinds of highly classified science and technology development--from fundamental concepts to things that almost seem like science fiction."

Ratcliff and a team of engineering researchers have created a unique program at
the university that builds a bridge between students and government research jobs.

EMPOWER STEM, funded by $748,000 from the Office of Naval Research, creates connections between Navy scientists and UArizona students and faculty. The program gives students opportunities to learn about the engineering behind the latest technologies in the Department of Defense and Department of the Navy. In return, government labs gain access to a well-prepared, diverse pool of potential employees.

Read more.

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 Jobs

**Manager, Engineering and Design**  
Phoenix, AZ

**Engineer**  
Chandler, AZ

*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 for the 2021 Virtual PECon**

Registration is now open for NSPE’s Virtual Professional Engineers Conference 2021 (August 3–5). The **early bird registration rate deadline is July 15**.
Attendees will have access to up to 14 unique and insightful PDH sessions (live and on-demand sessions) and will have the opportunity to collaborate with peers and experts from across the country through morning “coffee chats” and Mastermind sessions. In the Mastermind sessions, attendees will address their most pressing professional issues and tap into the knowledge, experience, and advice of their peers and PE experts to help workshop solutions. There will also be virtual engineering facility tours and a celebration of PE Day (August 4).

**PECon at a Glance**

- **Bridging the Gap to Leadership: Connecting the Skills You Have with the Skills You Need** (Shelley Row, P.E., CSP, Leadership and Decision-Making Expert)

- **Florida International University Bridge Failure, A Study in Ethics** (Susan Sprague, P.E., F.NSPE, Senior Associate, and Eric Tappert, P.E., Consultant)

- **AI and the Evolving Role of the “Traditional” Engineer: An Engineer’s Perspective from NASA to Infrastructure and Beyond** (Kimberly Johnson, P.E., Founding Principal)

- **Reaching New Heights in Engineering** (Alan Mallory, P.E., PMP, Speaker, Author, and Performance Coach)

**Registration Options**

A **Day Pass** for NSPE members is $99 until July 15 and $149 after July 15. The pass provides access to four PDH sessions, networking morning “coffee chat” roundtables of your choice each day, and evening post-session discussions.

The **All Access Pass** for NSPE members is $249 until July 15 and $299 after July 15. This pass provides access to 14 PDH sessions, access to daily networking morning “coffee chat” roundtables, and evening post session discussions.

Student members can register for a Day Pass or the All Access Pass for free until July 15. The rate for both passes is $50 after July 15. Nonmembers can
Women in Engineering Event to Explore Gender and Racial Equity

DiscoverE and the Congressional Women in STEM Caucus will co-host an event on June 23, in celebration of International Women in Engineering Day. The event will include a lively panel discussion exploring the factors that attract girls to engineering, why women persist in the field, and the role you can play in achieving gender and racial equity in engineering and technology.

NSPE Government Relations staff coordinated the participation of the Women in STEM Caucus for the event. The Women in STEM Caucus seeks to bring public and congressional awareness to policies, programs, and initiatives that support women in STEM fields, and develops the next generation of women leaders. Rep. Chrissy Houlahan (D-PA), Rep. Debbie Lesko (R-AZ), Rep. Haley Stevens (D-MI), and Rep. Jackie Walorski (R-IN) serve as caucus co-chairs.

NSPE recognizes the benefits of a diverse population of licensed engineers in shaping the future of engineering. Diverse backgrounds foster unique contributions and capabilities and create an inclusive community ultimately leading to a more creative, effective and technically respected community.

Register here.

2021–22 Call for Volunteers

NSPE needs your knowledge, expertise, and time to help the Society carry out its vision and mission and meet the goals of the strategic plan. Volunteer positions begin in mid-August and end at the 2022 Professional Engineers Conference.

There are three types of volunteer opportunities:

- **Level 1 (Highest Engagement)–Standing Boards and Committees**
  Often includes attending at least one in-person meeting. Most meetings held via video conference. Terms may be up to three years.

- **Level 2 (Intermediate Engagement)–Ad Hoc Committees and Task Forces**
  Activities primarily include online correspondence and video conference meetings.
Level 3 (Lowest Engagement)—Ad Hoc Volunteer
Volunteer on a project-by-project basis.

Submit forms by July 9 to be considered for a 2021-22 term.

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

To update your e-mail address, visit 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*