PE MATTERS STATE NEWS

NSPE-MT

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State News for NSPE Members

What's the Status of Bridges in Montana?

A recent American Road & Transportation Builders Association report provides a snapshot of the status of bridges in the US. The association compiled state profiles and rankings from the Federal Highway Administration's 2019 National Bridge Inventory Data (released in April 2020).

The recent report showed that more than one third (37%) of US bridges—nearly 231,000 spans—need repair work. More than 46,000 bridges are rated in poor condition and classified as "structurally deficient." A total of 81,000 bridges should be replaced. While the number of structurally deficient bridges declined by 900 compared to 2018, it still would take more than 50 years to repair them all.

The profile highlights the following about bridges in Montana

- Of the 5,278 bridges in the state, 380, or 7.2%, are classified as structurally deficient. This means one of the key elements is in poor or worse condition.
- This is up from 303 bridges classified as structurally deficient in 2015.
- The deck area of structurally deficient bridges accounts for 7.8% of total deck area on all structures.
- 30 of the structurally deficient bridges are on the Interstate Highway System.
- 368 bridges are posted for load, which may restrict the size and weight of vehicles crossing the structure.
- The state has identified needed repairs on 1,006 bridges at an estimated cost of $707.9 million.
- This compares to 961 bridges that needed work in 2015.

New Report Highlights National Flood Risks

When adjusting for future environmental changes, flood risk is increasing in the state of Montana. According to a report by the First Street Foundation, by 2050 the number of properties with substantial risk in the state will increase by 4.7%,

bringing the total number of properties with substantial risk to 128,300. Currently, there are 122,600 properties with a substantial risk of flooding. Across the country, the number of properties facing substantial risk will increase by 10.9% to 16.2 million, the report says.

While FEMA classifies 8.7 million properties as having substantial risk, or within Special Flood Hazard Areas (SFHAs), the new First Street Foundation Flood Model identifies nearly 70% more, or 14.6 million properties with the same level of risk. This means nearly 6 million households and property owners have underestimated or been unaware of their current risk. This discrepancy exists because the Foundation uses current climate data, maps precipitation as a stand-alone risk, and includes areas that FEMA has not mapped.

The model was produced by with researchers and hydrologists from First Street Foundation; Columbia University; Fathom; George Mason University; Massachusetts Institute of Technology; Rhodium Group; Rutgers University; the University of California, Berkeley; and the University of Bristol.

The model and data was shared with 100 academic researchers to use the data to analyze flooding's impact on the US housing market; its implications for lower income and minority communities; its cost to federal, state, and local taxpayers; climate gentrification; and fairness in federal flood mitigation spending among other issues.

Access "The First Annual National Flood Risk Assessment: Defining America's Growing Risk" report.

Looking for a Job or a New Employee?

Find new talent and opportunities on the NSPE Job Board.

Featured Opportunity
Montana State University
Post-docs and PhD-seeking graduate students are invited to join a collaborative project at Montana State University (Bozeman, MT) to study the bioenergy crop Camelina sativa.

Learn more and apply.

We Want to Hear from You!

Do you know of engineering news in Montana that would be great for this newsletter? Maybe it's a project you or your firm is working on, or perhaps you read

some interesting engineering news in your local newspaper. Or maybe you know of a fellow PE or student who deserves a little recognition. If so, we want to hear from you. Email your ideas to pemagazine@nspe.org.

NSPE Urges Veto of Structural Engineering Bill

In a letter to Georgia Governor Brian Kemp, NSPE encouraged the veto of a bill to establish a separate licensing system for structural engineers.

President-Elect Tricia Hatley, P.E., F.NSPE, wrote that creating a new licensing system for structural engineering does not improve the public health, safety, or welfare. “Instead, it muddies the water, creating confusion and requiring regulatory authorities to make arbitrary distinctions to define structural engineering,” she added. “Rather than reducing regulatory burdens, the change would add a new layer, requiring one engineer to obtain multiple licenses in order to do work that, previously, required only one.”

Instead of creating a separate licensing system, NSPE recommends a certification process that occurs after the professional engineering license has already been obtained. “This system would allow for the SE designation, if required or requested by potential employers or RFPs, without drawing the same, hard line between structural and other types of engineering,” Hatley wrote.

Read the full letter.

Take Action on Federal Infrastructure Bills

You have an important opportunity to add your voice to the debate around pending infrastructure legislation.

The first two bills are the House and Senate’s surface transportation infrastructure reauthorization bills—The INVEST in America Act (H.R. 2) and the America’s Transportation Infrastructure Act of 2019 (S. 2302). This is an opportunity to communicate to members of Congress the importance and value of having PEs involved in engineering decisions to protect the public health, safety, and welfare.

Take action on surface transportation reauthorization!

The third bill, the SMART Infrastructure Act (H.R. 4687), would take decision-making authority away from professional engineers and instead give it to state and local authorities, allowing them to select “appropriate” construction materials. The bill would establish that these entities would have the flexibility to select appropriate construction materials that meet the performance requirements of the contract and

enhance the service life, sustainability, and resiliency of the project.

NSPE opposes this bill because its enactment would prevent PEs from making the final decision on the appropriate construction materials for a project. Additionally, it establishes a federal interagency task force charged with deciding whether state and local procurement practices have artificial barriers to competition for new and innovative materials and recommending actions that can be taken to remove barriers. Their decisions could put the public at risk should these new and innovative materials present unforeseen harms to the public.

Voice your opposition to H.R. 4687!

Celebrate PE Day!

NSPE is celebrating licensed professional engineers with the fifth annual Professional Engineers Day on Wednesday, **August 5**. Join the Society in raising awareness about what it means to be a PE and showing appreciation for the work they do every day.

In lieu of in-district meetings with legislators, like those conducted last year, NSPE members will be able to participate in a series of panel discussions. The discussions will include members of Congress and/or their staff, who will share information on pending legislation that impacts the engineering profession. NSPE members will have opportunities to ask questions and to take action on the bills that are discussed by the panel.

PE Day falls within the week of the Virtual **PE**Con (August 3–7). As a highlight of PE Day, NTSB Chairman Robert Sumwalt III, will discuss "The Role and Responsibility of Professional Engineers in Ensuring Safety of Our Nation's Infrastructure." His presentation will touch on the NTSB's recommendation for eliminating the PE license exemption for public utility work, and the requirement for a professional engineer's seal on public utility engineering drawings, stemming from the tragic pipeline explosions and fires in the Merrimack Valley of Massachusetts.


SUMWALT


AMABA

IBM's Global Chief Technology Officer Ben Amaba, is also featured as a keynote speaker and will cover the professional engineer's role in artificial intelligence and technology.

Register for the Virtual **PE**Con.

Share with your network

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