State’s Manufacturing Sector Receives C Rating

Minnesota’s manufacturing industry received a C+ rating in the 2020 Manufacturing Scorecard from Ball State’s Center for Business and Economic Research. The report analyzes how states rank among their peers in areas of the economy that impact manufacturing and logistics, and aims to help site selection committees.

Minnesota received a failing grade in the category of tax climate, down from a D- in 2019. The national score average for was a C. However, Minnesota fared better in other categories, earning an A in human capital and a B in manufacturing, logistics, productivity and innovation, benefits costs, global position and expected fiscal liability gap. Diversification within the sector ranked slightly lower, with a C average, as opposed to the nationwide average of A.

The state’s scores at a glance:
Logistics: B+
Human capital: A
Worker benefit costs: B+
Tax climate: F
Expected Fiscal Liability Gap: B
Global reach: D-
Sector diversification: C
Productivity and innovation: B

Visit the Manufacturing Scorecard project website to view the performance history for each state and an archive of past reports with insight into the manufacturing industry.

The fine print: The categories in this report were chosen as those most likely to be considered by site selection experts for manufacturing and logistics firms, and by the prevailing research on economic growth. Each category included multiple variables for each state that were aggregated and then ranked 1st through 50th, with 1st being the most desirable. Within each category, the lowest aggregate score assigned provided the overall rank. Grades were assigned A through F using
a normal distribution of grades commonly known as a bell curve. Plus and minus scores were not assigned to A or F grades.

UMD Researching the Potential of Biochar

Researchers from the University of Minnesota Duluth are studying the applications of biochar, a charcoal-like substance that is made by burning biomass. The material can be used to filter harmful chemicals in stormwater runoff and improve soil richness and drought resistance. Carbon in the soil can also aid in mitigating climate change.

A group of multidisciplinary engineers and scientists from UMD’s Natural Resources Research Institute (NRRI) are studying these and other applications of biochar. They see the material as an important part of Minnesota’s future economy. The institute was created to help foster the economic development of Minnesota’s natural resources using environmentally friendly practices to promote private sector employment.

NCEES Monitors Pandemic as October Exams Near

NCEES is closely monitoring the impact of COVID-19 on the October 2020 pencil-and-paper exam administration. All exam site locations are currently proceeding with reduced capacity restrictions in place. Changes to state and local requirements that further reduce capacities for groups and events may impact the number of examinees that are able to test at a specific site. NCEES will continue to monitor these changes between now and exam day.

NCEES is aware that capacity restrictions are preventing many examinees from being able to register for the October exam administration. To accommodate as many examinees as safely as possible, NCEES has moved up the transition to computer-based testing for the PE Electrical and Computer: Power exam (registration is open with appointments starting in December 1) and will offer a regional pencil-and-paper exam administration in January for PE Civil examinees.

Minneapolis To Host Pencil-Paper PE Civil Exam Slated for January

To accommodate as many pencil-and-paper examinees as safely as possible, NCEES has added a regional exam administration in several locations on January 26, 2021, exclusively for PE Civil examinees. Registration for the regional PE Civil exam administration will open November 1, 2020, and close December 13, 2020, at 3 p.m. (EST).
The exam will be administered in Orlando as well as the following cities: Phoenix, Arizona; Pomona, California; Denver, Colorado; Hartford, Connecticut; Orlando, Florida; Topeka, Kansas; Raleigh, North Carolina; Cleveland, Ohio; Houston, TX; and Seattle, Washington. Additional cities may be added before registration opens.

Examinees who are located outside of these states should check with their state licensing board prior to registering to determine their eligibility to test outside of their jurisdiction.

Access ncees.org for exam updates.

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

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**Society Releases Policy Guide on Emerging Tech, Public Safety**

A new NSPE policy guide has added the professional engineer’s voice to the growing conversation around the safe development and deployment of emerging technologies. The guide’s safety recommendations begin with the premise that the public’s interests are best served when licensed professional engineers oversee the design, development, and/or deployment of emerging technologies.

NSPE’s Emerging Technologies Task Force crafted the recommendations as a starting point for adopting standards that protect public safety and to provide guidelines to measure the safety readiness of technologies before they are deployed. The guide is intended for public policy decisionmakers, regulators, manufacturers, and others.

The Society strongly encourages the adoption of these recommendations and is available as a resource for information and drafting of regulations.

Access the guide.

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**Nominations Open for Federal Engineer of the Year Award**

Honoring the commitment of federal engineers to innovation and service is the hallmark of the [Federal Engineer of the Year Award](https://www.nspe.org/feya). Nominations for the award, which attracts participation from more than a dozen federal agencies, are open until October 31.

The FEYA ceremony is scheduled for February 18, 2021, at the National Press Club in Washington, D.C. Tickets will be available for sale in January and
Timothy Sullivan, P.E., who has brought mechanical, civil, and environmental engineering expertise to the Air Force Civil Engineer Center in San Antonio, Texas, was named the 2020 FEYA winner. Sullivan developed the first-ever comprehensive execution guidebook to support $604 million in nationwide construction, and as part of that three-year project, he crafted a project risk management process to identify vulnerabilities of construction projects greater than $5 million.

Apply or nominate a worthy engineer today.

Upcoming Webinars: Traffic Signals, Forensic Engineering, Communications Skills, Vintage Trolley Cars, Design Safety

NSPE’s **PE Institute** helps members stay current in the profession, earn PDHs, and advance in their careers through webinars on important topics. The webinars are held at 2:00 p.m. – 3:00 p.m. EST at a member price of $99 ($129 for nonmembers).

**September 23**  
**The Physics of the Yellow Traffic Signal: ITE’s First Recommended Practice**  
The webinar will focus on the Institute of Transportation Engineers’ first recommended practice for calculating the duration of the yellow traffic signal.  
*Presenter: Brian Ceccarelli, P.E.*

**September 30**  
**So, You Want to Launch a Forensic Engineering Consulting Practice**  
Forensic engineers can operate as sole proprietorship, partnerships, professional corporations or be part of a multifaceted forensic engineering company or one of the many national forensic engineering investigation firms. This session addresses the opportunities for engineers interested in performing forensic engineering services as well as the issues they will need to address.
October 7

The Four Languages of Influence

Improve your influence by customizing your interactions to four distinct communication styles that will help make better connections.

Presenter: Roger Grannis

October 14

Vintage/Heritage Trolley Cars in Transit Use: Past, Present, and Future

The presentation will help attendees better understand the unique nature, challenges, and opportunities of vintage and heritage trolley cars in actual public transit use in the modern age, including vehicle engineering support and technical assistance, for these vehicles.

Presenter: Matthew Nawn, P.E., PMP

October 21

Too Many Crashes at Your Roundabout? Learn Design Techniques to Optimize Safety

This presentation will discuss how design safety principles affect how drivers receive and process information. For optimal safety and operations, the roundabout design must simplify decision-making and provide clear, concise information as to the correct way to drive the roundabout.

Presenter: Mark T. Johnson, P.E.

Visit NSPE's PE Institute.