

Testimony on Senate Bill 728

Senate Committee on Universities and Technical Colleges December 15, 2021

Chairman Roth, and members of the Senate Committee on Universities and Technical Colleges, thank you for allowing me to testify in support of Senate Bill 728.

Both nationally and right here in Wisconsin, there is a growing demand for more engineers in our workforce. Fortunately, a top ranked College of Engineering is right down the street educating tomorrow's engineering leaders. The College of Engineering at the University of Wisconsin- Madison is the second largest school on campus, producing nearly 1,500 earning degrees just last year. Each year, more and more students apply to the program than the university has the capacity to accept- only 1 in 7 are admitted into the college and many qualified applicants are turned away. These graduates are vital to our state's workforce and economic development needs, and we need more of them.

Expanding access to engineering degrees starts with creating more space for them to do their research. The College of Engineering at UW-Madison extends its impact to every corner of the state and beyond. From southwest Wisconsin, where students have worked on design projects at Taliesin in Spring Green, to the Northwoods where, in Minocqua, they learned about forest health by studying the groundwater availability and tree use, these students are at the forefront of research and innovation, keeping Wisconsin companies competitive with other states.

Senate Bill 728 allocates \$1,000,000 in building trust funds for the planning and design of a new engineering building at UW-Madison. This project is a critical component in our state's ability to keep pace with industry growth and to attract more engineering students. The additional funding for planning services will help keep this project moving forward into the next biennium. I hope you can join me in supporting this project.



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DATE: December 15, 2021

TO: Members of the Senate Committee on Universities and Technical Colleges

FROM: Tommy G. Thompson, UW System Interim President

RE: Testimony on Senate Bill 728

Thank you, Chair Roth and committee members, for providing UW System (UWS) an opportunity to submit testimony on Senate Bill 728 (SB 728). This legislation will allow for continued advancement of this vital building project for UW-Madison's top-ranked engineering program.

UWS is grateful for the earlier support from the Legislature to upgrade the Engineering Campus at UW-Madison. This critical project will lay the groundwork for increased safety and enhanced services to the campus, while providing the foundation for expanding the number of engineers that we produce each year.

From every corner of the state, we hear a constant refrain from business leaders and employers: they need more engineers. UW-Madison's engineering program is nationally recognized, producing nearly 1,500 engineers per year. Yet, this does not meet the workforce needs of our state, and employers have had to recruit from out of state. We have plenty of qualified talent in our state. Based on space limitations, only 1 in 7 applicants are granted admission to the engineering program at Madison even though there are many more qualified applicants. This investment will allow us to produce approximately 1,000 more well-trained engineers.

As our state continues to evolve in the 21st century, engineers will be one of the cornerstones of our advancement. Wisconsin must be on the leading edge of producing the next generation of engineers that will continue to build and propel our state. This requires state-of-the-art, hands-on learning, with the expansion of engineering into emerging areas. This project will provide both.

Thank you to the authors, Senator Jerry Petrowski and Representative Mark Born, for their efforts on this bill and thank you again to the committee for your consideration of this important investment in our state's future.

Testimony of Jeff Roznowski to the Senate Committee on Universities and Technical Colleges on Senate Bill 728

December 15, 2021

Good morning. Thank you, Chairman Roth and distinguished members of the Committee. My name is Jeff Roznowski of Wauwatosa and a proud alumnus of the UW – Madison College of Engineering Class of 1980. I come before you today to ask for your vote in favor of Senate Bill 728, which would use \$ 1 million from the State Building Trust Fund for continued planning and design of a new engineering building at the UW – Madison campus.

As a practical consideration, spending this additional money for planning for the proposed building makes sense because it is a logical extension of the \$500,000 planning budget approved and spent from the 2019 – 2021 State Budget; and aligns with the street utility work approved in the 2021 – 2023 State Capital Budget.

But the reasons for approving this expenditure go much deeper:

- If you are a supporter of higher education, especially education in the high demand field of engineering, and recognize the value of the nation's 13th ranked engineering school: The new building will allow enrollment to grow by 1000 undergraduate and 440 graduate students. Currently, only 1 in 7 applicants are admitted into the College of Engineering due to the lack of classroom space.
- If you support the economic value of creating high paying jobs: the new building will
 produce engineering graduates who receive on average 9 -12 job offers at annual salaries
 of \$70,000 and higher. Half of these graduates remain in Wisconsin to work.
- If you recognize the competitive nature of engineering schools in the Big Ten: the new building will allow UW – Madison to keep pace with other Midwest campuses who have

more recently expanded their engineering enrollments and modernized and expanded their classroom space with new buildings.

 If you recognize the risks associated with substandard safety and deferred maintenance of the buildings in the College of Engineering, as you did with the Humanities Building: the engineering building will address inadequate fire suppression and air handling systems.

I have personally witnessed the explosive demand for engineers as a senior executive designing and constructing communications networks throughout Wisconsin, as a Chamber of Commerce and other business associations Board member, and as an Alderman for the City of Wauwatosa, chairing the Community Development Committee.

We can accomplish Wisconsin based jobs, groundbreaking research, top-tier faculty and dymanic innovation with your vote in favor of Senate Bill 728, spending \$ 1 million for additional planning and design of the proposed new building on the UW-Madison College of Engineering campus. As you can see, the potential rate of return for this project would more than justify the additional expenditures.

Thank you for your thoughtful deliberation and for your service to the people of Wisconsin.

On, Wisconsin!

Jeff Roznowski



Senate Committee on Universities & Technical Colleges 2021 Senate Bill 728

Planning and design of a new engineering building at the University of Wisconsin-Madison

December 15, 2021

Chairman Roth and members of the Senate Committee on Universities & Technical Colleges:

My name is Ian Robertson and I am the Grainger Dean of the College of Engineering at the University of Wisconsin-Madison. Thank you for the opportunity to address the committee and testify today in support of Senate Bill 728, which would provide \$1 million in Building Trust Funds (BTF) for planning and design of a new UW-Madison College of Engineering building project. Thank you to Senator Petrowski and Representative Born for authoring this proposal.

Building a new multidisciplinary engineering educational and research facility at UW-Madison will enable growth in the College of Engineering. It will allow us to increase the number of undergraduates from 4500 to 5500, meaning we will be able to accept more than 1 in 7 applicants – student demand for a UW-Madison engineering degree is that high.

College of Engineering alumni live and work in all 72 counties in Wisconsin. They are and will continue to be vital to the state's workforce and economic development needs. We hear from Wisconsin employers like Plexus, Oshkosh Corp, Rockwell, Sub-zero Wolf-Cove, Kohler and others that they need more UW-Madison engineers. In 2019, our engineering graduates had access to more than 12,000 job opportunities – the competition to hire them is that intense.

Our ranking as a top engineering college attracts the best students and faculty. Of course, the ranking is predicated on educating engineering leaders and our research prowess – our annual research expenditures exceed \$100 million and make over 100 patent disclosures. However, attracting the top talent is competitive and engineering colleges at Illinois, Ohio State, Michigan and Purdue and elsewhere have been constructing new instructional and research facilities, increasing opportunities for students to study engineering, and hiring more faculty and staff. Our facilities, even with our aggressive renovation campaign, prohibit significant growth in the number of students and in the faculty and staff to educate them, and in engaging in research that will make it attractive for companies to locate to Wisconsin. The U.S. is investing billions into research designed to reestablish our nation's leadership in critical technologies, which is essential for future economic growth and national security. This money will be directed toward top engineering programs; Wisconsin's ability to secure this funding is closely tied to the new building, it will enable Wisconsin to lead in re-establishing our leadership in critical technologies and attract companies to the state.

The project represents a 50/50 partnership with the State of Wisconsin. Pending campus and Board of Regents approval, we hope to come back to the legislature in the 2023-25 state budget with a request for \$300 million, \$150 million in general fund supported borrowing and \$150 million in private funds.

We look forward to partnering with the state to grow and meet demands from Wisconsin employers and continue to help drive innovation in our state. I am happy to answer any questions at this time and I encourage legislators to visit us on campus to learn more about the engineering program at UW-Madison and the building project.

For more information, please visit www.engineeringthefuture.wisc.edu

Distinguished Members of the Senate Committee on Universities and Technical Colleges. I appreciate having the opportunity to submit written testimony in support for Senate Bill 728.

The UW-Madison College of Engineering is a top-ranked, nationally recognized program graduating nearly 1,500 engineers per year. Engineering faculty, staff, and students are at the forefront of research and innovation. They disclose more than 100 inventions each year and generate more than \$100 million in research expenditures annually.

Due to space constraints, only 1 in 7 applicants are admitted into the college and many resident qualified applicants are turned away. In a time when many employers are facing workforce challenges, UW-Madison engineering graduates are in high demand and are vital to the state's workforce and economic development needs, and we need more of them. Employers in the State of Wisconsin and throughout the country cannot hire enough engineers to meet the demand; they are eager to see UW-Madison expand their engineering enrollment. On average, a UW-Madison College of Engineering student has 9 to 12 job offers upon graduation.

The UW-Madison College of Engineering new building project will support increased growth: the building expansion will allow enrollment to grow by 1000 undergraduate and 440 graduate students.

When completed, it will be a 340,000 square foot facility that will promote state-of-the-art hands-on learning, a critical component of a top-tier engineering program. The building will also create flexible multidisciplinary research space that enables the college to expand into emerging research areas that are important economic drivers. These facilities will allow UW-Madison to attract and retain top students and faculty to continue educating tomorrow's engineering leaders, generate research funding, and enhance the college's national reputation.

Senate Bill 728 would provide \$1 million of Building Trust Funds (BTF) to conduct planning and design services and prepare a design report to construct a new engineering building at UW-Madison.

Please consider supporting Senate Bill 728. Thank you for your consideration.

Sincerely,

William S Monfre Shawano, WI