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Testimony in front of the Assembly Committee on Jobs and the Economy Special Session Assembly Bill 1 Ray Cross, UW System President August 3, 2017

Good afternoon. Thank you for the opportunity to share a few thoughts on the Foxconn Technology Group project. As President of the UW System, I want to be clear: the benefits of the proposed Foxconn enterprise to the University of Wisconsin System – and by extension to the State – are enormous. To have the opportunity to be a part of such a transformative project at this time in Wisconsin's history is personally exciting and invigorating.

This project could catapult us (the University and the State) into a position of global prominence in the rapidly growing and important field of digital imagery. It isn't just that liquid crystal display technology will allow us to participate in the most modern manufacturing techniques for smartphones and related technology. It also connects us with other fields that are heavily dependent on the most advanced imaging technology – fields like healthcare, radiology, and intelligent diagnostic systems.

I see three main areas of opportunity for the UW System, and the state. Number one, opportunities for our students, our faculty, and our graduates. Number two, opportunities for expanded business partnerships. Number three, an opportunity to build our educational capacity in important areas.

Let me briefly address each area.

First, the Foxconn project presents new and different opportunities for our students, our faculty, and our graduates. New internship opportunities, new collaborative research opportunities, and of course good job opportunities are also exciting!

Bringing Foxconn's operations to Wisconsin will expand the high-tech manufacturing arena in a state that has traditionally been known for manufacturing other consumer hard goods. This will have major implications for engineering, computer science, medicine, business management, and many more. UW-Madison and UW-Milwaukee as well as our other campuses are already poised to leverage Foxconn's extensive global partnerships to tap into additional federal and/or private funding to create more opportunities for our UW researchers.

Students will also benefit with expanded internship opportunities. Foxconn has already expressed interest in developing this relationship with UW.

The UW System graduates more than 36,000 students each year. The potential job opportunities with – or related to – Foxconn could help keep these highly educated graduates in Wisconsin. This is particularly important given our long-term demographic challenges.

Second, the Foxconn proposal is an opportunity for the University to develop and expand new and existing business partnerships through a globally connected enterprise.

A key element of our strategic plan, 2020*FWD,* is building stronger relationships with the business community.

Our goal is to collaborate strategically with all Wisconsin businesses. As Foxconn defines its future, we need to understand what they want their future to be like – so we can effectively change with them in order to better meet their needs.

This business partnership will also provide an opportunity to work more closely with our K-12, technical college and private college partners as we collaborate to better serve all Wisconsin businesses.

Third, the Foxconn project presents an opportunity for the UW System to build our educational capacity in several vital program areas that will be of benefit to our state, to our existing businesses – and yes, to Foxconn as well.

The Joint Finance Committee created an innovation fund in their budget package to increase our capacity in targeted program areas specifically for high demand fields.

Building our capacity in engineering is of particular importance today. As you know, we have nationally recognized engineering programs at UW-Madison and at UW-Milwaukee. We also have outstanding engineering programs at several of our comprehensive campuses. We have requested state support for a new engineering building at UW-Platteville, as well as some much-needed improvements to the engineering facilities at UW-Milwaukee. UW-Madison's College of Engineering is working on a proposal for needed facility and equipment improvements. Last year, the Board of Regents approved a

Chippewa Valley engineering consortium that includes UW-Stout, UW-Eau Claire, and UW-River Falls. Collaborative engineering programs – such as the partnership between UW-Parkside and UW-Milwaukee or UW Colleges and UW-Platteville – also expand the reach of existing programs to students around the state. In addition, the Green Bay community is also seeking more engineers, and we are partnering with areas businesses and the community to find ways to meet their needs.

The Foxconn proposal demonstrates why these moves are important. It also underscores why we must do much more and do it now! Remember, it will take at least four years before our investments today yield the needed additional engineers.

UW-Milwaukee Chancellor Mark Mone, UW-Madison College of Engineering Dean Ian Robertson, and UW-Parkside Chancellor Debbie Ford are here with me to briefly share their campus perspectives on this project.



Testimony re: Foxconn Legislation Mark Mone, Chancellor, UW-Milwaukee August 3, 2017

Thank you for the opportunity to offer perspectives on the Foxconn legislation.

Like President Cross, we see potential benefits that will directly strengthen our students, faculty, staff, and alumni at UW-Milwaukee and the larger region. I'll describe three areas in parallel with the UW System benefits:

First, based on our conversations with Foxconn and business leaders in Milwaukee, we believe that benefits will accrue from the increased employment opportunities for our students and citizens in the state. At Milwaukee, we draw almost 90% of our students from Wisconsin and almost this many remain here for their entire working career. With Foxconn and the associated growth in suppliers and supporting businesses, the demand for students in engineering, information technology, computer science and business fields will grow, increasing our enrollments.

A second, important dividend of having Foxconn in the state is that it would strengthen the relationships we have with many of their partner firms, including Rockwell Automation, GE Healthcare, Brady Corporation, and many others. We have longstanding partnerships with these firms and are immersed today in conversations about the need for additional student interns, employees, and research partnerships. Indeed, yesterday at UWM we launched the Rockwell Automation Educator's Conference involving 73 faculty from 37 countries, involving dozens of managers and senior RA leaders. With Foxconn having 170 suppliers in the US alone, we also see tremendous potential for increased demand for students in all areas of UWM as the region grows.

Finally, with additional investments from the state and Foxconn for increased capacity at UW-Milwaukee, UW-Madison, and UW-Parkside, among others, the entire region will benefit from a larger supply of engineering and technology talent. A prime example is the Technology Pathway Partnership between UW-Parkside and UW-

Milwaukee, in which students complete their first two years at Parkside and are streamlined into UWM where they study for mechanical, industrial, electrical or other engineering and computer science degrees. These and related fields are essential for growing a prosperous regional economy.

In closing, thank you, again, for the opportunity to speak to this legislation, which will enable Foxconn to build its operations, develop strong bonds with UW-Milwaukee and others, and strengthen Wisconsin's standing globally.



Testimony re: Foxconn Legislation Ian Robertson, Dean, UW-Madison College of Engineering August 3, 2017

Thank you for the opportunity to present testimony on this legislation. I am pleased to represent UW-Madison Chancellor Rebecca Blank, who could not be here today. UW-Madison is excited about the possibility of partnering with Foxconn. Having a high-tech manufacturer of this scale located in Wisconsin is an excellent opportunity for our students in terms of internships and career placement, and for our researchers in terms of potential research partnerships and the development of cutting edge technologies here in the state of Wisconsin.

UW-Madison already provides a talent pipeline for companies in the state and we look forward to partnering with Foxconn to help meet their demand for highly-skilled employees. We have top-ranked engineering, computer sciences and business programs, including one of the country's top supply chain management programs -- something Foxconn has expressed significant interest in already.

Our College of Engineering has completed a series of renovation projects and has the capacity to enroll an additional 500 to 600 students if funding for additional faculty and staff is provided by the state. Similarly, the university's business and computer science programs can help address the long-term workforce needs of Foxconn, and other businesses in the state, with state investment allowing for the expansion of these programs.

With Foxconn planning to be operational by 2020, we will need to act quickly to ensure there's enough engineering and other talent in the pipeline.

It's important to note that graduates from the UW-Madison College of Engineering are getting multiple offers of employment – there simply are not enough engineering students graduating in Wisconsin to meet the demand of companies. And all of us want to do everything we can to make sure Wisconsin-based companies have Wisconsin graduates working for them. This is good for our state's economy and good for those companies who demand the best and brightest employees.

But in addition to hearing from companies that they need more engineers, we are increasingly hearing that they want those engineers to have some background in business. It's particularly important for those engineers that want to advance into leadership positions within industry. Indeed, Chancellor Blank heard this exact request from representatives from Foxconn when she met with them last month. The Wisconsin School of Business currently offers a Certificate in Business program that provides non-business students the opportunity to earn a concentration in a clearly defined academic program in business. The coursework allows students to develop a foundational understanding of business and apply this to their specific field, such as engineering. I know that many of my College of Engineering students have taken advantage of this program over the last few years.

But there is an opportunity to develop a new program, which will likely launch as a certificate program, between the College of Engineering and the School of Business specifically geared toward teaching engineering skills to business majors, and business skills to engineers. UW-Madison is uniquely qualified to create such a program that would be run by two nationally ranked schools – U.S. News and World Report ranks the College of Engineering's undergraduate program 14th in the nation and the Wisconsin School of Business undergraduate program is ranked 19th. We know that a new program that provides this sort of cross-training to engineering and business students will benefit not only our students but companies like Foxconn and others across Wisconsin that have a significant need for new employees with these complimentary skill sets.

I have already had preliminary conversations with Chancellor Blank and our new Dean of the Wisconsin School of Business, Anne Massey, about our interest in standing up such a program. Support from the state will be key to building the capacity we need to graduate more students with skills like these that companies across our state are seeking.

There are other opportunities with Foxconn as well. In addition to meeting immediate employment needs by graduating more engineers, business students and computer science students, UW-Madison researchers can also assist Foxconn with

technological improvements through all aspects of manufacturing, materials, devices and systems, device architecture, data analytics and data visualization, etc.

In addition, UW-Madison already has strong research partnerships with major health care companies like GE Healthcare. Foxconn also has an interest in this area and could collaborate with UW-Madison's scientists to help develop the next generation of medical devices.

And there are existing ties between the UW Carbone Cancer Center and the National Taiwan University Cancer Center, to which Foxconn chairman Terry Gou is a major donor. The late UW oncologist Paul Carbone spent time in Asia helping develop the oncology profession in countries like Taiwan, where he advised the National Taiwan University. While in Taiwan Carbone met oncologist Ann-Lii Cheng, who then trained at UW-Madison for two years -- overlapping with Howard Bailey, the current director of the UW Carbone Cancer Center. There is significant potential for joint collaborations between these two leading cancer centers.

In closing let me reiterate UW-Madison's great interest in working with Foxconn and its related enterprises. With support from the Legislature we believe there is significant opportunity for Wisconsin students, for research partnerships in the state and for advancing the Wisconsin economy.

Thank you for your time.



Testimony re: Foxconn Legislation Deborah L. Ford, Chancellor, UW-Milwaukee August 3, 2017

Good afternoon, I am Debbie Ford, Chancellor of the University of Wisconsin-Parkside. Thank you for this opportunity.

More than 70 percent of UW-Parkside students are from Kenosha, Racine and Milwaukee counties and the majority of our graduates stay in the area. We are minutes from leading global companies and we have numerous partnerships that benefit our students, our faculty, those organizations, and our communities.

We work closely with Gateway Technical College to offer clear pathways to fouryear degrees – most notably in the areas of IT and business management.

An opportunity to partner with Foxconn, and companies Foxconn may attract, will take the educational experience for our students and faculty to a new level.

Ninety percent of UW-Parkside pre-med graduates are accepted to the medical schools of their choice – more than double the national average. We offer an elite pre-med program.

It's beyond exciting to think about how a connection with top medical and biotechnology research supported by Foxconn – which was noted in a Milwaukee Journal Sentinel story on Tuesday – might elevate the learning experience of our pre-med and biotechnology students.

The same is true for information technology.

The number of students in our computer science and MIS programs has doubled in the past decade. Our placement rate for computer science graduates is 99 percent. The program is home to the Parkside App Factory, developing mobile-app technology used around the world, including the FRANK LLOYD WRIGHT Trail app here in Wisconsin. If you are a student interested in the health sciences, technology or business, you will want to study in Wisconsin and establish your career in Wisconsin because you understand the value of a resource like Foxconn. We need to be prepared for unprecedented growth in many of our academic programs at UW-Parkside and throughout the UW System.

One definition of *horizon* is the limit of a person's mental perception. Companies like Foxconn are far beyond the technology horizon, and – as President Cross said – this has the potential to transform Wisconsin and the UW System. Wisconsin becomes a destination for education because it becomes a destination for exciting careers beyond today's horizon.



Closing Remarks Ray Cross, UW System President

As you can see, the UW System is perfectly positioned to help the State meet this need and to do it quickly.

We have already been working to expand our capacity in several key fields, including engineering and computer sciences, even before this Foxconn project was brought to the table.

The Foxconn project will increase the demand for our programs and graduates. As the legislature reviews this bill and this project, I hope you will also consider investing to further expand UW System's capacity to meet the critical needs of existing Wisconsin businesses and the ever-changing needs of Wisconsin's future economy.

Thank you for your time.