Performance

Graduation rates, total number of graduates, degrees awarded in stem and health fields, time to graduation, credits to degree, retention rates, placement of graduates, and the percentage of residents and nonresidents who reside in this state 10 years after graduation are reported using the UW System Accountability Dashboard. The dashboard is located here.

Financial

Financial Reports from Each UW System Institution

The UW System financial reports are prepared annually according to standard accounting principles and posted online.

Access and Affordability

Low-income students, underrepresented minority students, undergraduate new transfer students, published and net cost for resident students, and UW institutional aid for students with need are reported using the UW System Accountability Dashboard. The dashboard is located here.

Family Income

Family income information is available for students who completed a Free Application for Federal Student Aid (FAFSA) and were offered financial aid. In fall 2018, 70% of undergraduates enrolled in UW System institutions fit this description. Family income is determined differently for dependent vs. independent The majority of under-graduates are students. The median family income for dependents. undergraduate students was \$72,065 in 2018-19. Incomes also vary by residency status. Non-resident and reciprocity students have higher family incomes among dependent undergraduates. Out-of-state independent undergraduates and graduate students have lower incomes.

UW System Median Family Income of Financial Aid Recipients by Residency Status and Dependency Not Including UW-Madison

i i i i i i i i i i i i i i i i i i i				
2018-19	Resident	Reciprocity	Non- Resident	All
	Resident	recipiocity	itesiaene	74.1
Undergraduate				
Dependent	\$83,173	\$107,580	\$101,530	\$87,233
Independent	\$18,792	\$13,819	\$18,530	\$18,457
Total	\$67,965	\$100,091	\$85,548	\$72,065
Graduate				
Dependent	*	*	*	*
Independent	\$29,414	\$16,941	\$27,754	\$27,950
Total	\$29,488	\$16,791	\$27,938	\$27,987

^{*}Median income for dependent graduate students is included in the graduate student total.

Improvements Made in Transfer of Credit

UW System replaced the Transfer Information System (TIS) Credit Transfer Wizards through a subscription for two transfer technology solutions, the Transfer Evaluation System (TES) is an administrative tool and the public-facing Transferology (TFO). The subscription includes all UWS institutions, the Wisconsin Technical College System districts (WTCS), the Lac Courte Oreilles Ojibwa Community College, and the College of Menomonee Nation. Transferology enables students to search for transfer equivalency matches from in-state and out-of-state institutions, as well as from military and standardized exam programs including Advanced Placement (AP) test, International Baccalaureate (IB) program, College Level Examination Program (CLEP), and the DANTES Subject Standardized Test (DSST).

The Universal Credit Transfer Agreement (UCTA) between the University of Wisconsin System and the Wisconsin Technical College System includes courses that are transferable to all UWs and WTCS districts as a general education or general degree requirement course. The UCTA went into effect July 1, 2014. Specific information about how each course in the UCTA will transfer to a receiving institution and satisfy general requirements is seen through Transferology.

The UCTA, Transferology and more transfer resources are available on the Transfer Wisconsin website. Transfer Wisconsin may be viewed here.

High School Students

The UW System served nearly 9,700 students in 2018-19 who were still in high school, through UW course offerings and through college credit programming at participating high schools. In 2018-19, high school students attempted over 48,000 UW credits through these courses.

Undergraduate Education

Access to required courses, improvements in student experience, participation in internships or cooperative work experiences, and closing the equity gap are reported using the UW System Accountability Dashboard. The dashboard is located here.

Majors Offered

UW System institutions offer 300 undergraduate majors. The UW System's Higher Education Location Program (UW HELP) maintains a breadth of information regarding UW System institutions. UW HELP's MajorMania is a tool for prospective students, parents, high school guidance counselors, and others, which provides information about the majors offered at UW System Institutions.

Access to Popular Majors

Enrollments of junior and senior undergraduates indicate that the most popular majors sought by students were in Business, followed by Education, and Health.

UW System Undergraduate Enrollments by Major Category, Fall 2019 Not Including UW-Madison

Maior Cotocom	Junior &	Junior & Senior		
Major Category	#	%		
Business, Management, Marketing, and Related Support Services	11,359	21.5%		
Education	5,401	10.2%		
Health Professions and Related Programs	4,443	8.4%		
Biological and Biomedical Sciences	3,100	5.9%		
Visual and Performing Arts	3,009	5.7%		
Psychology	2,877	5.4%		
Engineering	2,602	4.9%		
Social Sciences	2,579	4.9%		
Computer and Information Sciences and Support Services	2,311	4.4%		
Communication, Journalism, and Related Programs	2,089	3.9%		
Parks, Recreation, Leisure, and Fitness Studies	1,278	2.4%		
Natural Resources and Conservation	1,223	2.3%		
Multi/Interdisciplinary Studies	1,177	2.2%		
Public Administration and Social Service Professions	1,155	2.2%		
Homeland Security, Law Enforcement, Firefighting and Related	1,064	2.0%		
English Language and Literature/Letters	1,052	2.0%		
Agricultural/Animal/Plant/Veterinary Sciences and Related	965	1.8%		
Physical Sciences	917	1.7%		
Engineering Technologies and Engineering- Related Fields	846	1.6%		
Mathematics and Statistics	765	1.4%		
Foreign Languages, Literatures, and Linguistics	695	1.3%		

History	603	1.1%
Liberal Arts and Sciences, General Studies and Humanities	479	0.9%
Architecture and Related Services	232	0.4%
Family and Consumer Sciences/Human Sciences	224	0.4%
Philosophy and Religious Studies	162	0.3%
Area, Ethnic, Cultural, Gender, and Group Studies	133	0.3%
Communications Technologies/Technicians and Support Services	81	0.2%
Legal Professions and Studies	59	0.1%
Science Technologies/Technicians	55	0.1%

Categories are those used in the USDE Classification of Instruction Programs.

Post-Graduation Success

Examinees from UW System institutions performed above the national average on verbal and writing sections of the Graduate Record Exam (GRE). Scores on quantitative section of the GRE, nursing licensure, and all sections of the Medical College Admissions Test (MCAT) were slightly below national averages. The average pass rate of the CPA examination was below the state of Wisconsin average.

UW System Post-Baccalaureate Examinations
Not Including UW-Madison

Post-Baccalaureate Examination UW System National				
Professional	Nursing	85%	88%	
Licensure or Certification Pass Rates	Certified Public Accountant (CPA)	57%	59%*	
	Verbal (130-170)	150.7	150.3	
Graduate Record Exam (GRE) Scores	Quantitative (130-170)	149.7	153.7	
	Writing (0-6)	3.8	3.6	
	BBLS (118-132)	124.8	125.3	
	CPBS (118-132)	124.4	125.3	
Medical College Admissions Test	PSBB (118-132)	124.7	125.8	
(MCAT) Scores#	CARS (118-132)	124.0	124.7	
	Total Score (472-528)	497.9	501.0	

^{*}Pass rate is for state of Wisconsin graduates only.

UW-Eau Claire selected to participate in the Title IV-E program, which provides tuition and a stipend to a select group of social work majors during the last two semesters of their BSW program. Students complete additional child welfare-focused coursework and a 432-hour internship. Upon graduation, the students work for at least one year as a social worker in public child welfare in the State of Wisconsin.

The UW-Green Bay Professional Program in Education and the Green Bay Area Public School District partner to provide pathways for licensure for teachers on

^{*}Based upon data provided by the Association of American Medical Colleges ("AAMC"). The views expressed herein are those of the authors and do not necessarily reflect the position or policy of the AAMC. Sections of the MCAT are described <a href="https://example.com/herein/h

emergency licenses needing English as a Second Language (ESL) licensure. This project is supported by the Wisconsin Fast Forward Program, a state-funded grant program through the Department of Workforce Development (DWD) that encourages school boards or other governing boards of schools to partner with post-secondary institutions or other entities to address area workforce demands. The \$250,000 grant provides two-years of funding and primarily covers course tuition and books for participants. Due to flexibility of the Professional Program in Education, participants may continue employment with the district while progressing toward teacher licensure.

The Greater Green Bay Chamber selects 15 Current Young Professionals with potential to lead their communities, places of work, and families. Three of the 15 are employees of UW-Green Bay, and four are UW-Green Bay graduates.

UW-La Crosse two-time alum Kayleigh Day works to address social inequities in public health. Using her Women's, Gender, and Sexuality Studies and Community Health Education (2011) and a Master's in Public Health (2016) degrees, she serves as a community health educator in Sparta, WI for Monroe County. Her effort focuses on getting better access to health services related to alcohol and other drug abuse, suicide prevention, and nutrition. Kayleigh received the Rosandich Graduate Thesis Award from UW-La Crosse in recognition of the best graduate thesis for impact, originality, and writing quality.

UW-La Crosse Master's of Education in Professional Development graduate Sara Compton, class of 2011, received the 2018-19 Milken Education Award. This national honor includes a \$25,000 grant and is bestowed on teachers who are innovators in the classroom. Ms. Compton's use of incorporating student choice aids motivation and behavior.

Over the past five years, pre-health graduates from UW-Parkside applying for professional health programs have been accepted at a rate of 87%. This includes a 79% acceptance rate for medical school applicants, far exceeding the national rate of 40%.

UW-River Falls alum Cathy Wurzer received the 2018 Distinguished Alumnus Award. Wurzer is a four-time Emmy Award winner for her work on the Twin Cities Public Television program "Almanac", which she has cohosted since 1995. Additionally, she is a recipient of

the Edward Morrow Award, a current member and former president of the Minnesota Chapter of the Society of Professional Journalists, and served on the Board of Directors for the UW-River Falls Foundation from 1997 to 2005.

Also, at UW-River Falls the U.S. Department of Education renewed the McNair Scholars Program hosted on campus since 1999. Through the program, participants from disadvantaged backgrounds demonstrating high academic achievement receive assistance preparing for doctoral study. Research is the focus of most projects conducted by McNair Scholars.

Online test preparation classes are offered by UW-River Falls to provide graduate school applicants tools and strategies to perform well on graduate admissions exams. Participants receive live, online instruction from a test preparation expert, a student workbook, and software containing multiple practice exercises and tests. Test preparation classes are one example of service to lifelong learners by UW-River Falls.

UW-Stout estimates the starting salaries of its 2017-18 graduates to total \$68.8 million. This approximation is based on the total number of graduates who entered the workplace and the median starting salaries of all graduates.

The UW-Whitewater Institute for Sales Excellence, in support of the mission of the College of Business and Economics, seeks to become the preeminent sales institute in the Midwest. The institute prepares students through sales competitions, career fairs, a mentor program, and internships. Students find placement in numerous companies including Kohl's, American Family Insurance, Fastenal, Northwestern Mutual, Sherwin Williams, and many more.

The Institute for International Business Collaboration (IIBC) within the UW-Whitewater Department of Marketing better prepares students to face the cultural challenges of a global work world by providing international experience and increased cultural awareness through virtual and on-site international business collaborations. During the 2018-19 academic year, the IIBC provided virtual international collaborations for 370 students. The IIBC also sent four students and one faculty to Arnhem, Netherlands for a marketing simulation competition, managed a faculty swap between UW-Whitewater and

Hogeschool van Arnhem en Nijmegen (HAN) University of Applied Sciences, and sent four UW-Whitewater sales students and one faculty to Giessen, Germany. Students and faculty from HAN and Giessen were hosted by the IIBC to attend the UW-Whitewater American Marketing Association regional conference. The IIBC provides faculty with the training and resources they need to integrate international collaborative experiences in and out of the classroom.

UW-Superior students find success upon graduation, whether it's a job in their field or pursuit of a higher degree. Twenty-three academic programs boast a 100% post-graduate success rate, and 95% of UW-Superior graduates are employed or in graduate school within six months of graduation. One such graduate is Maryelle Nyeck, a 2018 UW-Superior chemistry major. She conducted research under associate professor of chemistry Dr. Lorena Rios Mendoza on microplastics environmental pollution. Through her research, Maryelle identified microplastic particles (fragments, microbeads, and fibers) in water and in fish stomachs, presenting her microplastics research at the state and national level. Maryelle is now a graduate student at Alabama State University, studying forensic science.

Graduate and Professional Education

Graduate and Professional Degrees Awarded and in Key Areas

During the 2018-19 academic year, the UW System awarded 3,710 degrees at the Master's level, 164 degrees at the Doctorate-Research/Scholarship (Ph.D.) level, and 185 degrees at the Doctorate-Professional Practice level. Of these 3,902 degrees, 32% (1,236) were in key areas such as Business, Nursing, Engineering, Physical Therapy, and Audiology.

UW System Graduate and Professional Degrees Conferred Not Including UW-Madison

Degree Level	Area	2018-19
	Business	844
	Engineering	168
Master's	Nursing	36
	Other	2,662
	Total	3,710

	Business	7
	Engineering	28
Doctorate- Research/Scholarship	Nursing	13
Researchy Scholarship	Other	116
	Total	164
Doctorate-Professional Practice	Audiology	5
	Nursing	94
	Physical Therapy	65
	Other	21
	Total	185

Graduate Participation in Internships or Cooperative Work Experiences

Graduate students commonly participate in internships and cooperative work experiences as a component of their UW graduate program. These may be in the form of direct or indirect observation of professionals in the workplace, or through working in a cooperative group to problem solve and present group projects.

Incentives Provided for Remaining in the State after Graduation

Currently, financial incentives such as student loan-forgiveness programs, tax credits, or home ownership assistance to students who remain in the state after graduation are not available to UW graduates. However, there are non-financial reasons for graduates to remain in Wisconsin such as graduate and advanced degree opportunities, and the overall quality of life.

UW System institutions are engaged in developing a stronger workforce, creating stronger businesses, and building stronger communities for our graduates to live, work, and play. Tens of thousands of UW graduates enter the workforce each year, ready to put their talent and entrepreneurial spirit to work as the business and community leaders of tomorrow.

Faculty

Faculty teaching loads and success or failure in recruiting and retaining scholars and teachers are reported using the UW System Accountability Dashboard. The dashboard is located here.

The UW System institutions recruit nationally and internationally for quality faculty and staff. The competitive academic job market, along with a challenging economic environment, adds additional

pressure to recruitment and retention efforts. The high cost of turnover is reflected in costs not solely related to recruitment expenses. Turnover also involves lost productivity and additional administrative costs. In addition, the loss of grant funding and the negative impacts on reputation and morale can be significant.

The UW-La Crosse Human Resources office monitored success of 32 faculty and 41 instructional academic staff (IAS) searches from August 2017 through May 2018. Among the faculty positions, 20 (63%) were filled, nine (28%) were cancelled, and three (9%) were declared failed searches. For the IAS positions, 38 (91%) were filled, and four (9%) were cancelled.

In 2018-19, UW-Parkside held 13 searches for new faculty positions to begin in fall 2018. The top candidate was hired in six of the searches. Additionally, a top-tier candidate was hired in one search, two searches failed, and four remain in progress.

UW-Stout has been recognized for outstanding programming, led by outstanding faculty, through the past year. Awards have included a Game Design program ranked 21st in the nation by Princeton Review, our Master of Science in rehabilitation counseling ranked fourth best in the nation by U.S. News and World Report, our School of Hospitality Leadership ranked 11th in the world, and 9th in the United States by CEO World Magazine. However, UW-Stout has continued to have challenges recruiting and retaining faculty.

To counteract these trends, UW-Stout initiated a major competitive compensation initiative based on market, merit, and equity for faculty and staff. Approximately \$3.45 million in base funding was reallocated over a five-year period for supplemental

compensation programs. Even with these supplemental compensation programs, salaries for UW-Stout faculty and staff fall well below market comparisons:

 In a national survey by the American Association of University Professors (AAUP), UW-Stout's faculty salaries were ranked far below the median. Professors are paid just below the 10th percentile for master's institutions, associate professors are paid slightly below the 10th percentile, and assistant professors are paid slightly above the 20th percentile.

- UW-Stout's average salary for all faculty and instructional academic staff ranks is nearly \$12,664 lower than the average salary of its peer group.
- In terms of retention, in the most recent data (2017-18), UW-Stout had 6.8% attrition of faculty, compared to a System-wide average of 7.3%. In 2016-17, UW-Stout had 8.6% attrition of faculty.
- UW-Stout's faculty are at 89% of the Public Master's Median CUPA salary. By rank, professors are at 85%, associate professors are at 88% and assistant professors are at 92%.

The UW-Whitewater departments of Economics, Management, IT and Supply Chain Management, Marketing, Occupational and Environmental Safety and Health, and Finance and Business Law reported several successes recruiting new faculty and academic staff. Among these departments, nine faculty and one academic staff were hired, retentions included one faculty and three academic staff, while two faculty and one academic staff departed, and two faculty retired.

UW-Eau Claire's Communication Sciences & Disorders (CSD) department is the recipient of the 2019 UW System Board of Regents Teaching Excellence Award. The CSD department takes a multifaceted approach to teaching and learning, including its reciprocal mentorship program, scholarship of teaching and learning lab, instructional internship program, and its creation of system-wide think tank that facilitates collaboration across the UW campuses. The CSD department also hosts daylong professional seminars that are open to students, faculty and staff, and community members and feature prominent speech-language pathology clinicians and researchers.

Economic Development

Revenue Brought into the State

Revenue brought into the state through federal, state, and private sources totaled \$435.2 million in fiscal year 2019. This extramural funding contributes to the development of new knowledge, improves the learning experience of students, and creates jobs. Extramural funding comes from outside the institution and includes funding for research as well as instruction and other activities. It may come from federal, state and local governments, business, private foundations, or individuals.

UW System Extramural Funding by Source

Not	Including	UW-Madison
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	FY17	FY18	FY19
	\$M	\$M	\$M
Federal	\$397.3	\$350.1	\$310.1
State (WI)	\$18.0	\$10.9	\$9.9
Private/Other	\$118.4	\$112.4	\$115.1
Total	\$533.7	\$473.4	\$435.2

Extramural Projects in Progress or Completed and Government Contracts

Academic research and development at UW System institutions is a significant source of economic activity for Wisconsin. The number of new projects, projects in progress, and projects completed in fiscal year 2019 totaled 2,538. This decrease, compared to the prior two years, is due to an actual reduction in extramural funding received and a significant reclassification of projects reported as "ongoing" in prior years that were actually "ended."

UW System Extramural Projects
Not Including UW-Madison

Not including ow-iviation						
	FY17		FY18		FY19	
	#	\$M	#	\$M	#	\$M
New	1,772	\$272.3	2,058	\$254.9	1,851	\$263.6
On-Going	661	\$143.5	597	\$126.9	362	\$103.3
Ended	646	\$117.9	542	\$91.6	325	\$68.2
Total	3,079	\$533.7	3,197	\$473.4	2,538	\$435.2

Includes extramural funding in the form of gifts, grants, and contracts.

Patents and Licenses for System Inventions

UW System institutions commercialize research discoveries in part through affiliated technology foundations. The Wisconsin Alumni Research Foundation (WARF) serves UW-Madison. The UWM Research Foundation serves UW-Milwaukee. The WiSys Technology Foundation serves the 11 UW comprehensive institutions.

 Through WiSys and the UWM Research Foundation, in fiscal year 2019, UW System institutions generated 13 U.S. patents and executed nine new licenses for technologies. In addition, these institutions generated 108 disclosures of inventions or other intellectual property.

New Businesses Created or Spun Off

In addition to patents and licenses, WiSys and the UWM Research Foundation provide valuable support to faculty and staff seeking to commercialize a discovery by creating a new business.

- Since its inception in 2005-06, WiSys has facilitated 17 startup companies by UW faculty members from discoveries at UW comprehensive institutions.
- The UWM Research Foundation facilitated 17 startups from fiscal year 2010 (FY10) through FY19 based on UWM technology. An additional two startup companies make use of technology licensed from the UWM Research Foundation. UW-Milwaukee faculty members also created additional businesses that do not involve technology licensed through the foundation.

Recent startup companies include Pantherics, Inc. (addressing unmet needs in the treatment of asthma), Hydracore Performance, LLC. (tools for strength and balance training), and Estrogenix (developing treatments for the symptoms of menopause). Pantherics was awarded a Small Business Innovation Research (SBIR) grant and completed a merger with a San Diego-based biotech company to form a platform company. Previous UWM startup company, SafeLi, LLC was awarded a second SBIR grant to further develop novel materials to improve the performance of lithium-ion batteries.

UWM created the Lubar Entrepreneurship Center, thanks to the generous gift of \$10 million from the Lubar family. Other supporters, including Mary and Ted Kellner, Jerry Jendusa, Avi Shaked, and Babs Waldman have joined the Lubar family bringing total support raised from donors to more than \$16 million. In May of 2019, the Lubar Entrepreneurship Center and Welcome Center celebrated the grand opening of the facility that will be a focal point for UWM's entrepreneurship activities as well as the home of the UWM Welcome Center. Significant entrepreneurship programing is already being delivered. One example is the Fresh Ideas program which achieved more than 3,000 student interactions in fall 2018 through 18 Ideas Challenge "pop-up" classes that integrate entrepreneurship programming and the Student Startup Challenge. The Student Startup Challenge, now in its seventh year, is supporting 30 UWM student entrepreneur teams in seven customized tracks that include product design, web and mobile, social enterprise, health care, food industry, business operations, and sports marketing.

The UW System Administration's Institute for Business & Entrepreneurship dedicates consultation time to pre-venture entrepreneurs. Specific training is conducted online, in person, and via phone to serve

business clients throughout the state. This structure allows for efficient and accessible delivery of information. Direct work with pre-venture clients primarily occurs with Wisconsin's Small Business Development Center Network (SBDC) and the Center for Technology Commercialization (CTC).

SBDC offices serve the entire state through 11 fouryear campuses, the Southwest regional outreach area, and one office based at the Waukesha County Center for Growth. Additionally, the Business AnswerLine provides live consultants during business hours and 24/7 online service.

In 2018, SBDCs fielded 2,944 requests for assistance from new and existing businesses through the Business AnswerLine; 1,413 pre-venture clients received no-cost consultation; 2,611 participants were served through 135 business-education training events; and 256 new businesses were opened with the help of these services.

The Entrepreneurial Training Program (ETP), delivered through the SBDCs in partnership with the Wisconsin Economic Development Corporation (WEDC), is particularly effective for clients seeking to start a new business. Almost 40% of all clients who complete the course and submit a business plan successfully launch their businesses. SBDCs deliver ETP courses producing about 179 graduates each year.

The Center for Technology Commercialization (CTC) works to turn innovative ideas into full-fledged businesses. Through educational programs including SBIR Advance and SBIR Ready as well as step-by-step consulting, CTC helps businesses compete successfully for over \$2 billion in federal Small Business Innovation Research funds as well as other funding.

Students can complete their first year of study while in high school through a pilot Information Technology (IT) program—a partnership between UW-Oshkosh, UW-Green Bay, UW System, regional UW Colleges, and with support of local technical colleges—leading to reduced time to earn a bachelor's degree while helping meet Wisconsin's workforce needs. The IT program will build on the Cooperative Academic Partnership Program (CAPP) concurrent enrollment program, a UW-Oshkosh collaboration with local high schools to provide students the chance to earn college credit. The NEW IT Alliance, composed of northeast Wisconsin IT companies, acts as an advisory group to the IT program.

Clearwater Labs at UW-Eau Claire is a group of Blugold self-starters who are building a software consulting business in the Chippewa Valley. This 100% student-run company offers technology solutions to area businesses while providing high-impact educational experiences to Blugold students. One of Clearwater's first major projects was developing the Parking Notifier, software designed to help campus and community members comply with alternative street parking regulations during snow emergencies.

UW-Green Bay's Cofrin School of Business sponsored the first ever Acton Children's Business Fair. The fair was an opportunity for children to launch their very own startup business — develop a brand, create a product or service, build a marketing strategy, and then open for customers at a one-day marketplace.

In partnership with biologists from UW-Green Bay's College of Science, Engineering and Technology, The Farmory opened Wisconsin's first full-scale year-round commercial fish hatchery this winter. The partnership combines UW-Green Bay's faculty and student expertise, along with the The Farmory's innovative indoor vertical aquaponics system and large hatchery space. Community support and a grant from the WiSys Technology Foundation jump-started the project hiring fish biologist Ken Webb, an associate researcher at UW-Green Bay. Webb's leadership and expertise in the industry allows for potential development of new intellectual property and will position The Farmory as a regional center of excellence in the aquaculture and indoor AgTech industries.

The UW-Parkside College of Business, Economics, and Computing (CBEC) SBDC delivered counseling and/or business training to a total of 179 existing businesses and nascent entrepreneurs in Southeast Wisconsin. In this work, the SBDC provided a total of 796 client hours, obtained an additional 55 long-term clients, had 49 attendees in courses designed to help develop new businesses or spin-offs, started 16 new businesses, created 17 new jobs, and provided a capital infusion of \$3.2 million. The SBDC partners with Wisconsin Women's Business Initiative, Kenosha Area Business Alliance, Racine County Economic Development Corporation, and both the City of Kenosha and the City of Racine.

In March 2019, UW-Parkside hosted a free educational seminar titled, "Hemp Help: Growing your Canna Business in Wisconsin" with Shimadzu Corporation to launch a service to test businesses' CBD and hemp

products for tetrahydrocannabinol (THC) potency. Shimadzu provides equipment that will be used by UW-Parkside chemistry faculty and students in its SC Johnson Integrated Science Laboratory in support of the emerging industry.

UW-Whitewater is dedicated to supporting small business success through the SBDC and partnerships with economic development throughout the region. The SBDC at UW-Whitewater helps small business owners and entrepreneurs gain knowledge, tools, and connections that build success. Through no-cost consulting, business education, customized solutions, and regional expertise, SBDCs support job creation and retention and assist with capital formation.

In 2018-19, the UW-Whitewater SBDC served 128 total clients, helped client businesses retain 83 jobs, create 41 new fulltime jobs, and raise nearly \$8 million in capital. The SBDC also supported 15 new business starts and \$4.7 million in sales growth.

The Wisconsin Innovation Service Center (WISC) provides business growth, new product comercialization, and market research to inventors, manufacturers, and other small businesses. This business outreach service utilizes the knowledge and talent of UW-Whitewater student employees, as well as professional staff, to provide market information that supports sales and employment growth.

Secondary Businesses Affiliated with the UW System Supporting Sponsored Research

The UW System supports Wisconsin businesses through the products and services it purchases in connection with sponsored research. The number of vendors affiliated with the UW System totals 690, not including vendor purchases made through electronic banking cards, and generates \$6.7 million in revenue to those businesses. Similarly, 490 Wisconsin businesses are supported by the UW System totaling \$1.4 million in revenue. Purchases made through electronic banking account for another \$4.8 million in spending.

UW System Vendors and Purchases Not Including UW-Madison

Not including Off Madison					
	Total		Wisconsin		
	Vendors	\$	Vendors	\$	
2014	1,793	\$5.3 M	1,161	\$2.5 M	
2015	1,610	\$4.7 M	1,056	\$1.9 M	
2016	1,311	\$4.3 M	804	\$1.6 M	
2017	1,016	\$5.0M	580	\$1.3M	
2018	751	\$6.0M	362	\$1.4M	
2019	690	\$6.7M	490	\$1.4M	

Does not include \$4.8 million in FY19 purchasing card transactions.

Support Provided to Existing Industries Throughout the State

Joint industry-university research partnerships are one way UW System institutions support Wisconsin businesses.

The UWM Research Foundation continues to support development of promising technologies through the Catalyst Grant Program, thanks to the support of the Lynde and Harry Bradley Foundation, the Rockwell Automation Charitable Corporation, and Healthcare. Eighty-nine funded projects have provided \$5 million in support to UWM investigators. This support has led to more than \$19 million in follow on investments in UWM technologies in the form of grants, technology investments by companies, and equity funding in UWM startup companies. This support has also helped in the creation of 15 UWM startup companies.

In November of 2017, UWM announced the creation of the Connected Systems Institute – made possible in part by a \$1.7 million gift from Rockwell Automation. The term "connected systems" refers to use of big data that machines and devices stream over the "internet of things" to optimize processes. Inspired by discussions with executives at Rockwell Automation and Microsoft, UWM established the Connected Systems Institute (CSI) where researchers and industry partners conduct advanced research aimed at advancing digital manufacturing and preparing a skilled workforce of the future. CSI is building a state-of-the-art facility at UWM, which will offer unique testing platforms to CSI manufacturing partners.

U.S. News & World Report has ranked the University of Wisconsin MBA Consortium program among the top nine programs in the nation in its Best Online MBA Programs rankings. The UW MBA Consortium is the only program in the upper Midwest included in the top 10 in the 2019 rankings, and has been ranked in the

top 5 percent of all online MBA programs in the country since U.S. News began ranking online MBA programs in 2015. The Consortium includes UW-Eau Claire, UW-La Crosse, UW-Oshkosh and UW-Parkside, and is managed by UW-Eau Claire.

In September 2018, UW-Green Bay and many partners broke ground on the Brown County STEM Innovation Center on the UW-Green Bay campus. The center will house the Richard J. Resch School of Engineering, the Einstein Project, UW-Extension, and the Brown County Land and Water Conservation departments. attendance were Governor Scott Walker, Brown County Executive Troy Streckenbach, UW-Green Bay Chancellor Gary L. Miller, and Einstein Project CEO Kelly Ellis. Many UW-Green Bay community partners attended, including Krueger International CEO Dick Resch, members of the Kress Family, Wisconsin Public Service, and UW-Green Bay science and engineering faculty. These stakeholders exemplify the powerful transformation enabled by collaborative education, community, and business partnerships.

The Consortium of Applied Research (CAR), created in 2018 within UW-Green Bay's Psychology Department, supports local businesses, non-profits, community organizations, and educational entities by translating research into practical solutions. The CAR currently has a \$225,000 yearly contract with the Department of Public Instruction, as well as ongoing contracts with local school districts and local non-profits. The CAR created two new positions at UW-Green Bay that support the work with the Department of Public Instruction. The Consortium's mission is to help community-based organizations collect and interpret high-quality data, collaborate on grant writing initiatives, and inform policy and decision making, and plans to continue expansion of services in future years.

UW-Green Bay invested in a state-of-the-arts Skills Learning Lab to provide an environment that fosters communication and counseling skills, teach professional practice behaviors, and create opportunities for interdisciplinary learning among students in education and health-related fields. The Skills Learning Lab demonstrates UW-Green Bay's commitment to helping the community fulfill the increasing demand for social workers, educators, and other fields. Professional Program in Education students will use this space to investigate teaching and learning practices that impact student understanding of literacy, mathematics, science, and social studies.

This new learning lab will ensure that UW-Green Bay students can learn in a world-class learning environment while also further developing community partnerships and growing overall impact.

For a decade, UW-Green Bay has collaborated with business partners to bridge a perceived gap between the business world, the natural environment, and the role of public policy to sustain both. The university now has over 100 graduates with certification from the Environmental Management and Business Institute helping them connect business and the environment and lead in both areas.

The UW-River Falls SBDC received the Wisconsin 2019 Small Business Development Center Excellence and Innovation Award for improving the role of the center in small business impact. In 2018, the center consulted with 126 clients starting 22 new businesses, including 48 new jobs and \$3.5 million in capital investment.

The UW System Administration's Institute for Business & Entrepreneurship helps entrepreneurs, businesses, and economic development professionals across the state achieve their goals by offering technical assistance and leveraging data. The division follows a collaborative model, working with local organizations, other institutions, and partnering across all program units to best serve clients.

Highlights of the division's work include:

- 256 new businesses opened;
- 751 new jobs created;
- 155 jobs retained;
- \$100 million in capital investment for Wisconsin businesses.

The five program units within the division are:

- The Wisconsin Small Business Development Center (SBDC) Network, which provides support for small business startup, growth, and management through local consulting and education in a nationally accredited network.
- The Center for Technology Commercialization provides funding and business assistance for technology entrepreneurs and researchers to bring innovative technologies to market.
- The Food Finance Institute is a collaborative network of food entrepreneurs, finance expertise, and investment resources focused on catalyzing

profitability, scalability, and funding in Wisconsin's food sector.

- The Center for Business Intelligence is a collection of business, market, and competitor intelligence to help business owners and economic development organizations improve decision-making and detect business opportunities.
- The Business Dynamics Research Consortium builds and delivers economic and business activity data resources to stimulate research and inform local economic development strategy.

UWM and the UWM Research Foundation continue to administer the National Science Foundation (NSF) Innovation Corps (I-Corps) site grant that includes other Milwaukee area institutions (Medical College of Wisconsin, Marquette University, Milwaukee School of Engineering, and Concordia University). UWM received a two-year renewal from the NSF for this grant, which trains teams in market discovery techniques based on the "lean launch" methodology. As of April 2019, 95 teams have completed the program – these teams were drawn from UWM its and partner institutions. In addition, the site has also supported teams from other institutions including Northwestern University and the University of Wisconsin-Madison. These teams conducted more than 3,300 customer interviews; they have launched 22 companies so far and raised over \$3.7 million in support.

UW-Milwaukee and Marquette University collaborate to host an NSF Industry/University Cooperative Research Center (I/UCRC), the Water Equipment & Policy (WEP) research center. The Center was formed in 2010 and has grown to include 18 member organizations. Since its inception, the center has received a total of \$8.9 million in funding from industry partners and federal funding organizations and work done by grantees has led to five patent applications and 12 licensing agreements. In 2016, UWM partnered with the University of Arkansas and the University of South Carolina by joining its second I/UCRC, the Grid-connected Advanced Power Electronic Systems (GRAPES). As a GRAPES partner, UWM builds on the success of the WEP by bringing with it local industry partners including, Eaton, DRS Technologies, We Energies, G&W Electric, S&C Electric, and American Transmission Company.

The Northwestern Mutual Data Sciences Institute was formally announced in June of 2018. It is an

unprecedented partnership among Northwestern Mutual. Marquette University and Northwestern Mutual and its foundation will contribute \$12.5 million, and UWM and Marquette will each contribute in kind and fundraising of \$11.25 million over the next five years. The total \$35 million investment will support endowed professors, data science faculty positions, research projects, and expanded student programming which will begin fall 2019. Data science blends statistical analysis, big data, computer processing, and provides computational techniques that give researchers a tool for modeling complex processes. The institute aims to leverage UWM research in business, engineering, health sciences and social sciences to help solve some of society's biggest problems while supporting ethical use of data.

At UW-Parkside, the SBDC provides companies eligible for the Minority Enterprise Development Program, section 7(j) of the Small Business Act, with training, technical assistance, and opportunity to connect to the water cluster in Milwaukee. Section 7(j) of the Small Business Act authorizes the U.S. Small Business Administration to enter into grants, cooperative agreements, or contracts, with public or private organizations that can deliver management or technical assistance to eligible individuals and enterprises. When 7(j) eligible small businesses get involved in a cluster of business activity, growth for the businesses as well as jobs in the region are generated.

UW-Parkside offers affordable continuing education for employees of businesses and non-profit organizations throughout Southeast Wisconsin. Opportunities include certificate programs in inclusive leadership, non-profit management, and fund development. In 2017-18, Continuing Education and Community Engagement served 1,434 people to help improve area employers' service to the region.

The UW-Parkside App Factory is an interdisciplinary creative group that provides conceptual design and prototype mobile-app development services to generate solutions and strategies for technology challenges. In 2017-18, the App Factory provided service to 13 clients with 30 students participating in the work. App Factory projects included the Frank Lloyd Wright Trail, Kenosha Farmer's Market, the Racine Zoo, WGTD Radio, and the Bradley Corporation.

Science professors and students from UW-Parkside worked with U.S. Geological Survey researchers to begin water chemistry and biological monitoring of the Root River in partnership with the Waukesha Water Utility. Information gathered from monitoring the river will be used to understand water quality and biological conditions prior to treated water from Waukesha flowing into the river, which will happen in several years as part of the city's new water program.

The Ralph Jaeschke Solutions for Economic Growth Center (SEG Center) at UW-Parkside logged 95 projects involving 345 students in 2017-18 providing opportunities for students to gain hands-on experience solving business problems. Examples of projects completed include the development and implementation of business and marketing plans and the design and implementation of data networks, web applications, and database applications. Business partners include CNH, Aurora Healthcare, SC Johnson, Jockey, Modine, Runzheimer, and Twin Disc.

Racine and Kenosha are among 17 communities nationwide designated by the Lumina Foundation as Talent Hubs. With financial support from the Lumina Foundation, UW-Parkside, Gateway Technical College, Higher Expectations for Racine County, and Building our Future Kenosha County are working together to increase student success and ensure that the region has the talent needed to attract and retain exciting, innovative companies and organizations.

The NURSE 1-2-1 program combines resources of nursing programs at UW-Green Bay and Northeast Wisconsin Technical College (NWTC) to increase the number of nurses. The program provides an opportunity to earn a four-year Bachelor of Science Degree in Nursing (BSN) by taking courses during Year 1 at UW-Green Bay, Years 2 and 3 at NWTC to complete an Associate Degree in Nursing (ADN), and Year 4 at UW-Green Bay to finish the BSN degree.

Lambeau Field hosted the Tiny Earth event, a collaboration of UW-Green Bay and the Medical College of Wisconsin, in December 2018. Tiny Earth centers around a biology course in which students perform hands-on field research hunting in soil for new antibiotics. Tiny Earth is an innovative program spanning 44 states and 15 countries that inspires and retains students in the sciences while addressing one of the most pressing global health challenges of our century: the diminishing supply of effective antibiotics.

UW-Green Bay's Clerks and Treasurers Institute has direct impact on the quality of government in Wisconsin. Many local governments mandate clerks and treasurers to attend the university's three-year training program. In 2018, 325 clerks and treasurers attended the institute. The University of Wisconsin-Green Bay is the only certified provider and generates over \$550,000 in economic impact for Green Bay. UW-Green Bay also delivered trainings for approximately 1,300 municipal and county officials and offers 11 certificate programs with over 700 government officials attending.

Students in UW-Whitewater's Marketing 479 course partner with regional businesses to conduct market research and design marketing plans. During the Spring 2019 course, students partnered with 42 businesses.

UW-Whitewater's Chapter of the American Marketing Association (AMA) and its sister organization, Creative Marketing Unlimited, work with many existing regional businesses. Examples of work done by the AMA include market research, development and implementation of marketing plans, and event planning. Customers include the Lake Geneva Rotary Club's Women's Weekend event, Fort Healthcare, Rock River Stormwater Group, Phantom Lake YMCA camp, City of Beloit Public Works department, and Hydroponics for Milwaukee, a program that supports introduction of sustainable hydroponic agriculture managed by high school students with proceeds funding further education.

The business outreach mission of the Wisconsin Innovation Service Center (WISC) at UW-Whitewater successfully places interns at area organizations, municipalities, and businesses. During 2018-19, internships were secured for students at the Whitewater Area Chamber of Commerce, Downtown Whitewater Incorporated, United Way of Jefferson and North Walworth Counties, the Whitewater Grocery Company, and the community support organization Bethel House, a provider of transitional housing and case management for families facing homelessness.

UW-Stout's Discovery Center hosts a digital fabrication laboratory (FabLab) based on MIT's model and is available to all innovators who have a need to design, prototype, and build. In addition to entrepreneur and innovator support, the FabLab delivers professional development workshops, seminars, and mentoring to

Wisconsin's K-12 educators intent on infusing engineering design into curricula to improve learning outcomes and build student problem solving skills.

The Discovery Center also provides faculty and student applied research experiences, manufacturing outreach, consulting services, and professional education opportunities to a broad range of businesses, industries, and organizations. In 2017-18, the majority of services provided were in Organizational Change, Technology Services/Product Development, Automation, Lean Manufacturing, and Sustainability Services offerings.

The Discovery Center assists other key industry partners in addressing challenges to their continued growth and profitability. Manufacturing clients represent a broad array of Wisconsin's most important clusters including food processing, plastics, trailers information technology, appliances, production technology, non-metal mining, furniture, and wood products. Through a process of mapping project opportunities against an inventory of Discovery Center, UW-Stout, and partner resources, projects are selected based on scope and immediacy of impact to the company as well as fit with the research and career interests of our faculty and student teams.

Many UW System institutions provide additional business development assistance. UW System institutions reported 5,628 business development partnerships in 2017-18.

Job Growth from Support to Existing Industries and New Businesses

UW-Eau Claire has contributed to Wisconsin's creative industries by producing and sharing many successful musicians (such as Justin Vernon), artists (such as Rebecca Crowell), and writers (including Michael Perry, Max Garland, Debra Monroe, John Hildebrand, Jon Loomis, and B.J. Hollars). The Chippewa Valley Writers Guild (CVWG), founded by UW-Eau Claire faculty member B.J. Hollars, is a program of the Eau Claire Regional Arts Council and the University of Wisconsin-Eau Claire Foundation that seeks to support regional writers by serving as an organizing body committed to mentoring writers and writing groups, coordinating events, and providing outreach activities to the community. In addition, the CVWG also partners with Cirenaica, an arts-focused residency

committed to craft, creation, education, and community building.

Founded by Blugold alumni Zach Halmstad, Jason Wudi, and Julia Johnson, Pablo Properties is dedicated to the revitalization of downtown Eau Claire through economic development and philanthropy. Pablo Properties owns several high-profile hotels and restaurants and is creating housing opportunities in downtown Eau Claire. This new construction investment in Eau Claire has led to charitable efforts, most notably, a donation to The Pablo Center at the Confluence, a performing and visual arts center.

The UW-Green Bay, Division of Continuing Education and Community Engagement was honored with the Award of Excellence at the National Association for Regulatory Administration (NARA) 2018 Licensing Conference. The university was recognized for the development of an innovative online Community Based Residential Facilities (CBRF) Training Registry in partnership with the Wisconsin Department of Health Services. Through this unique partnership with the DHS, the UW-Green Bay significantly increased job growth and career opportunities for over 150,000 assisted living professionals in Wisconsin. Wisconsin CBRF Training Registry serves as the sole verification for assisted living professionals who have successfully completed state required courses in accordance with the Wisconsin Administrative Code.

In 2018, UW-Green Bay was awarded a \$64,000 grant from the National Security Agency (NSA) and the National Science Foundation (NSF), to develop and host a cybersecurity camp for teachers and educators throughout Wisconsin. The GenCyber program is part of the solution to the Nation's shortfall of skilled cybersecurity professionals. Through this grant, UW-Green Bay supports financial, transportation, water, power, and other industries critical to the safety and well-being of U.S. citizens. The supply of cybersecurity professionals has fallen far short of demand, with some studies estimating the gap being as large as 600,000 professionals needed to meet demand in the Nation.

UW-Parkside Chancellor Debbie Ford and UW-Milwaukee Chancellor Mark Mone led a panel discussion at the sixth annual Summit on Regional Competitiveness hosted by the Chicago Federal Reserve in October 2018. The panel focused on preparing for the Foxconn opportunity and the changing economic landscape of southeastern

Wisconsin. Education partnerships between UW-Parkside, UW-Milwaukee, and Gateway Technical College have created pathway partnerships for students to obtain the type of education credentials necessary for sustained future success.

The UW-Stout Discovery Center (DC) collaborates with industry partners to solve their current and future challenges. These collaborations include direct technical assistance through the DC's Manufacturing Outreach Center team, topical workshops, and certificate programs through the DC's Professional Education team and faculty-student applied research projects facilitated through DC project managers.

Since its inception, the Discovery Center has created or retained over 5,500 jobs and had more than \$800 million in cost savings, investment and sales. In 2017-18, the Discovery Center engaged over 3,500 participants in more than 50 professional education programs. Many of these programs enhanced industry capacity in quality systems, process improvement, and exporting. Additionally, in 2017-18, the Discovery Center engaged in 195 industry contracts resulting in clients reporting \$146 million in sales, cost savings, and investments as a direct result of the Discovery Center collaboration. In order to track the effectiveness of these collaborations, clients are surveyed by a third-party survey house. Integrated fully within the university, the Discovery Center engaged 186 faculty and students in the delivery of these industry applied research and knowledge transfer contracts.

The Discovery Center FabLab and Center for Innovation and Development also assisted over 80 entrepreneurs with product development and prototyping services and collaborate with a business accelerator in the Stout Technology and Business Park to provide a range of business development services to nascent businesses. The Discovery Center administers UW-Stout's interests in the Stout Tech Park, which is now home to 59 businesses employing over 2,850 people from Menomonie and the greater Chippewa Valley region leading to a regional economic impact of over \$250 million.

UW-La Crosse alumnus (2006) Curt Greeno helped grow Dynamic Lifecycle Innovations, a new electronics recycling business with locations in Wisconsin and other states, using the focus on values and shared vision he learned in UW-La Crosse management classes. The company has grown from two to 320

employees earning Greeno and his business partner Miles Harter the 2018 Wisconsin Small Business Person of the Year Award.

UW-La Crosse implemented courses to support student learning about drone technology and analysis of data gathered by use of drones. Students are working with faculty to explore ways drones may help local businesses and governments with various tasks. Areas being explored include mapping locations of underground utilities and monitoring changes to quarries including measurement of mined material.

At UW-Green Bay, the Gerontology Center, the College of Health Education and Social Welfare in partnership with the WiSys Technology Foundation sponsored the third annual Innovation in Aging competition. Through the challenge of designing an idea for making life better for older adults, nine student teams from all four UW-Green Bay colleges gained experience in innovative thinking, public presentation, and collaboration.

In 2018, Wisconsin businesses supported through UW System Administration's Institute for Business & Entrepreneurship programs saw great success: 751 new jobs were created, 256 new businesses were started, 155 existing jobs were retained, and Wisconsin businesses attained nearly \$100 million in capital investment.

Jobs Created in Campus Areas and Statewide

The 2018 UW System Economic Impact Study shows that the economic activity of UW System campuses, organizations, and activities create and/or support nearly 167,000 jobs annually. Jobs generated by the economic activity of the UW System come from the direct effect of spending (92,055 jobs), indirect effect of the direct spending (28,696 jobs), and induced effect of indirect economic activity (46,115 jobs). These jobs represent about 1 in 20 of the total number of employed workers in Wisconsin.

Scientific research at UW campuses is a key ingredient to job growth. Academic research and development represents a \$1.1 billion dollar industry in Wisconsin, one that has created over 38,000 jobs across the state, according to the Wisconsin Technology Council. Technology parks and innovation centers foster new businesses and job growth.

For example, companies in the Stout Tech Park in Menomonie capitalize on UW-Stout's expertise in packaging, plastics, and industrial technology. The Stout Tech Park also works closely with Wisconsin's National Institute of Standards and Technology (NIST) Manufacturing Extension Partnership (MEP) centers to provide process improvement and growth services to the Park's tenants.

Wisconsin businesses, supported through UW System Administration's Division for Business and Entrepreneurship programs, added 980 new jobs and retained 248 existing jobs in their respective locations.

The SBDC at UW-La Crosse is an active participant in the network of regional economic development professionals who work together to build stronger communities. Over 400 business owners and prospective business owners from seven counties of Western Wisconsin received business counseling services during the 2017-18 fiscal year. Of these, 372 clients met individually with SBDC advisors as they worked through their business decisions. Thirty new businesses were created and over \$6.8 million in loans or equity were reported for business starts or expansions. Over 1,600 client consulting hours were provided to 120 long term clients and others. Thirtythree programs and events were offered reaching approximately 670 participants.

Small Business Development Center staff on the UW-La Crosse campus actively participate in regional economic development activities. Professional development and management training programs served more than 140 people in 26 programs during 2017-18. Programs ranged from basic short courses to longer course programs, such as the eight-week business plan writing workshop or the certificate program in project management. The SBDC also participated in outreach, hosted informational

sessions on issues affecting business and regional economic development, and facilitated programs reaching over 525 participants.

At UW-La Crosse, the Center for Entrepreneurship and Innovation (CEI) supports business outreach and development, innovation, sustainability, international trade, and applied business research. The CEI collaborates with others to provide theoretical and practical support to foster business engagement, including entrepreneurial opportunities, economic development, and innovation.

The SBDC and CEI, together with the UW-La Crosse Collegiate Entrepreneur Organization (CEO) club, held Innovation Generation events for more than 20 college students to learn about more entrepreneurship. During the Innovation Lab, college students competed in the UWL I-Innovate Competition, worked on their business plans, and presented the plans at the Eagle Eye Business Plan Competition. One UWL team from the local Wisconsin Big Idea competition went on to compete in Madison at the statewide competition.

UW-Parkside hosted the Kenosha Area Business Alliance (KABA) 2019 annual meeting, where the president of KABA announced Kenosha County led Wisconsin in private sector employment growth in recent years. Since 2013, the county has added 11,000 jobs, \$1.5 billion in capital investment, and 11.6 square million feet of development.

At UW-Superior, research directly focuses on the Lake Superior region through the work of its Lake Superior National Estuarine Research Reserve, Lake Superior Research Institute, and the Great Lakes Maritime Research Institute (GLMRI), including UW-Superior's Transportation and Logistics Research Center, as an underpinning partner. These research centers support the physical, biological and socioeconomic environments of the Lake Superior basin, coordinate research into marine transportation, logistics, engineering, and port management, and seek improved understanding of Lake Superior estuaries and coastal resources.

The UW-Superior SBDC provides counseling, advice, training and resources to entrepreneurs and business owners statewide, contributing to the economic health and stability of Wisconsin. The SBDC is a founder and facilitator of the Superior PeerSpectives CEO Roundtable and the Twin Ports Inventors & Entrepreneurs' Club, and a partner and champion of the Lake Superior Angel Network and the Lake Superior Chapter of the Wisconsin Innovation Network.

In addition to creating and supporting job growth through research, development, entrepreneurship, partnerships, and collaborations, UW System institutions generate jobs throughout Wisconsin in other ways. Those jobs can be measured as direct faculty and staff employment, jobs generated by institutional operational expenditures, jobs created to support UW System employee spending, and jobs attributable to student and visitor spending.

Economic impact studies conducted by individual UW institutions demonstrate the job creation impact of these universities in the state and region. Note that these studies were conducted using differing methodologies and are not directly comparable.

UW-Stevens Point (Economic Impact Study 2015)	Jobs
Faculty and staff hired to teach, conduct research, provide public service, and perform administrative functions	1,458
Operational spending creates jobs in region and state	747
Employee spending creates jobs in region and state	1,186
Student spending creates jobs in region and state	956
Visitor spending creates jobs in region and state	584
Total*	4,931

^{*}Totals may not sum due to rounding.

Economic Indicators for Campus and Other Areas

The University of Wisconsin System is a powerful economic engine with a \$24 billion impact on Wisconsin's economy each year and providing a 23-fold return on Wisconsin's investment in the university, according to the 2018 UW System Economic Impact Study conducted by NorthStar Analytics. The UW System's \$24 billion economic impact in 2016-17 represents 7.7% of the total economic activity in the state.

The overwhelming beneficiary of UW System's economic impact is the state's private sector, receiving 75% — or \$18 billion — of the economic benefit annually. Spending associated with campus operations, UW Hospitals and Clinics, startups, students and visitors, and affiliated organizations benefit a wide range of private sector businesses.

Additionally, the UW System Board of Regents Research, Economic Development, and Innovation (REDI) Committee reflects the UW's increasingly important role in this area and aligns with changes in UW System staffing. The Associate Vice President for Economic Development provides leadership for the economic development portfolio, with 50% of the position funded by the Wisconsin Economic Development Corporation (WEDC), reflecting a strong university-state partnership that addresses the needs of established industries, fledgling start-ups, and growing communities all over Wisconsin.

UW System institutions contribute to the Wisconsin economy by educating students to be valuable members of Wisconsin's workforce, by supporting business development through linking academic

programs and research to entrepreneurship, and by engaging and building stronger communities. One way the economic impact can be measured is by the overall spending generated in the Wisconsin economy.

The economic impact is measured as direct spending by faculty, staff, students, visitors, and university operations. It is also measured as the indirect or induced spending which results from direct spending cycling through the regional and state economy. An important part of the impact, however, is the measurable effect of the institutions' alumni who live and work in the service area. Finally, it is important to note the return on investment for the taxpayers who support the institution and the students who attend.

UW-Stout (Economic Impact Study 2017)	
Total Impact	\$271.8 M
University Operations Effect	\$113.8 M
Student Spending Effect	\$9.5 M
Visitor Spending Effect	\$0.9 M
Alumni Impact	\$147.7 M
Student Return on Investment	\$3.50 per \$1
Taxpayer Return on Investment	\$3.50 per \$1

UW-Stevens Point (Economic Impact Study 2015)	
Total Impact	\$420.0 M
Direct Impact	\$269.5 M
Tax Revenue Impact	\$21.2 M
Return on Public Investment	\$11.00 per \$1

UW-Whitewater (Economic Impact Study 2016)	
Total Impact	\$407.0 M
Direct Impact	\$232.9 M
Tax Revenue Impact	\$17.9 M
Return on Student Investment	\$1.50 per \$1

The mission of UW-Whitewater's Fiscal and Economic Research Center (FERC) is to tap into UW-Whitewater faculty expertise and provide outreach services to members of the regional community. FERC student researchers conduct practical project-based work, which enhances their educational experience and maximizes their value to future employers.

FERC projects include studying the feasibility of specific industries, economic impact studies, and data analysis for survey and market research data. For example, FERC partnered with the Transportation Development Association of Wisconsin to evaluate gas tax options throughout the state. For the Wisconsin Economic Development Corporation (WEDC), FERC provided evaluation of brownfield investments in Wisconsin. Identification of the import and export

UW-Whitewater (Economic Impact Study 2016)	
University	3,662
Legislative Requirements – Performance	477
Visitors & Programming	212
Total*	4 351

history of Wisconsin's water industry was conducted for The Water Council. Economic value of the bluegreen corridor in Chicago was conducted for the Friends of the Chicago River. Market analysis of the pallet industry was performed for Pallet USA. For the Oneida Nation, FERC analyzed economic impact of the annual Oneida Big Apple Fest and provided a feasibility study of the Wisconsin's apple chip industry. Through collaboration with the regional Economic Development Partners, FERC analyzed the economic impact of the utility industry in Chicago. In partnership with Capital Policy Analytics, the economic impact of GE appliance was measured. Performance measures and economic impacts of the International Market Access Grant and Job Tax Credit programs were studied for the WEDC.

Economic Development Programs

The Incentive Grant Program (see last section) includes economic development programs that have been undertaken. One of three goals of the Incentive Grant Program is to advance activities of economic development programs as defined in s. 36.11 (29r) (a).

Collaboration

Partnerships and Collaborative Relationships with UW System Administration and UW System Institutions

The UW System engages in a wide variety of partnerships, both formal and informal, with businesses, not-for-profit organizations, governmental agencies, and other partners. These partnerships combine UW and non-UW resources to support programs or initiatives that benefit Wisconsin communities, the Midwest region, and beyond. The UW System collects data on several different types of partnerships that benefit businesses, communities, and educational and service organizations.

 In 2018-19, 19,247 UW partnerships were reported. UW System students, faculty, and staff further contribute to partnerships not covered by the categories below.

UW System Partnerships Not Including UW-Madison

Type of Partnership	Description	2018-19
Business development	Businesses or organizations receiving development assistance	5,293

Co-op or internship	Businesses or organizations hosting UW co-op or internship students	5,835
Service learning, community-based research, or volunteering	Organizations at which UW students or staff volunteered or partnered with for classroom learning or research	2,723
Cultural or arts-related	Organizations partnering to offer cultural or arts events	779
Student teachers	Schools hosting UW student teachers or practicum participants	2,194
Clinical, legal, or social work placements	Businesses or organizations hosting UW students in clinical, legal, or social work	2,423

Regional development partnerships are one way UW System institutions work with other sectors to align educational opportunities with regional economic needs.

- The Northeast Wisconsin Educational Resource Alliance (NEW ERA), begun in 2000, includes UW-Green Bay, UW-Oshkosh, four area technical colleges, and the College of the Menominee Nation. NEW ERA collaborates with manufacturing and information technology partners to provide educational resources that prepare graduates for the regional workforce.
- The Higher Education Regional Alliance (HERA), launched in 2018, includes UW-Milwaukee, UW-Parkside, UW-Whitewater, three area technical colleges, and 12 private higher education institutions in seven counties of southeastern Wisconsin. HERA seeks to reduce skill and talent gaps in the regional workforce and to identify new educational programs to meet the needs of the community.

The Behavioral Health Training Partnership (BHTP) at the UW-Green Bay provides training, consultation, and support to help Wisconsin county human services professionals and community organizations such as schools, foster parents, and law enforcement meet legislatively mandated training. The BHTP now serves 58 counties in Wisconsin and is working to reach all 72. This expansion supports uniformity in training among crisis programs and behavioral health services while easing the burden of training on counties outside of Northeast Wisconsin.

The Turbocharge collaboration is a partnership between UW-Green Bay, Northeast Wisconsin Technical College (NWTC), and Green Bay Area Public Schools with the goal of preparing all Green Bay Area Public School Students to be college, career, and community ready by graduating from high school with a minimum of 15 completed college credits. This helps ease the transition to college and decreases the time and cost of college degree completion for students who achieve the goal.

An additional program at UW-Green Bay, the College Credit in High School (CCIHS) program enrolled over 1,500 students in classes through partnerships with 40 Wisconsin high schools to offer college credit courses to high school students. During the 2017-18 academic year, students saved over \$1 million because of reduced tuition through the program.

As a result of the Clerks and Treasurers Institution, UW-Green Bay has robust collaborative partnerships with many related groups. These include the Wisconsin County Clerks of Circuit Court, Wisconsin County Constitutional Officers, Wisconsin County Treasurers Association, Wisconsin Government Financial Officers Association, Wisconsin County Clerks Association, Wisconsin Municipal Clerks Association, Municipal Treasurers Association of Wisconsin, International Institute of Municipal Clerks, Wisconsin Department of Revenue, Election Board, Public Service Commission, and Association of Public Treasurers in the United States and Canada.

UW-Green Bay geoscientists, limnologists, and natural resources educators, a water chemist, a biologist, a civil engineer, and a watershed scientist collaborated on a Sea Grant-funded effort to envision ecological conditions in Lake Michigan's Green Bay. The team seeks to understand and evaluate alternative approaches to meet water quality goals by building on prior models of the Green Bay watershed.

In October 2018, UW-Green Bay volunteers provided 719 hours of service at 18 sites. On campus projects included making 180 cards for disabled veterans through the TRIO Program, picking up garbage, painting, helping with plastic film recycling, and cleaning up the Lake Michigan Green Bay shoreline. Off-campus projects included garden cleanup, bulb planting, and organizing for the Festival of Lights at the Green Bay Botanical Garden, yard work and cleaning for the New Community Shelter, and helping the NEW Zoo get ready for Zoo Boo community Halloween event.

The UW-Green Bay Bachelor of Social Work senior class partnered with United Way to learn more about

UW-Green Bay students who identify as ALICE, which stands for asset limited, income constrained, and employed. Students used a photovoice methodology, which means that participants took photos to express what it means to them to have limited incomes while also balancing the expectations of being a college student.

The State of Wisconsin has enjoyed a sister state relationship with Heilongjiang (HLJ) Province in Northeast China since 1982. Although China is the largest sending country of international students currently studying in the U.S. (32%), Heilongjiang Province has been underrepresented. At the request of provincial government leadership, and with support from the UW System President's Office and the U.S. Department of State's Consulate in Shenyang, UW-River Falls coordinated two week-long outreach and recruiting trips to NE China in 2016 and 2017. All 13 UW System campuses have participated in these activities designed to promote UW System institutions through focused outreach programming in the region.

Academic degree program collaborations are formal arrangements among institutions to provide access to a degree program at multiple locations and to provide courses offered by different institutions. Staff members at partner institutions collaborate on the development, implementation, administration, and/or delivery of the program. Academic degree program collaborations allow faculty to share knowledge between institutions, conserve state resources by reducing duplication of degree programs, and provide students with wider access to programs.

UW System institutions have increasingly collaborated on offering academic degree programs. Since 1995-96, 14 collaborative degree programs have been implemented and all UW institutions participate in at least one collaborative degree program.

UW System
Collaborative Degree Programs
Not Including UW-Madison*

Not including OW-Madison			
Major Name	Major Level**	Institution***	Year Begun
Nursing-Collaborative	В	MSN, MIL, EAU, GBY, OSH, STP	1995-96
Business Administration (Consortial Degree)	M	EAU, LAC, OSH, PKS	2005-06
Audiology (Consortial Degree)	Y	MSN, STP	2005-06
Sustainable Management- Collaborative	В	PKS, RVF, SUP	2009-10

Health O Mellines	_	LAC DVE	2011 12
Health & Wellness	В	LAC, RVF,	2011-12
Management-		STP, SUP	
Collaborative			
Japanese Studies-	В	OSH.WTW	2011-12
Collaborative			
Health Information Mngt &	В	GBY, LAC,	2012-13
Tech-Collaborative		PKS, STP	
Sustainable Management-	М	GBY, OSH,	2012-13
Collaborative		PKS, STO,	
		SUP	
Data Science-Collaborative	М	EAU, GBY,	2015-16
		LAC, OSH,	
		STP, SUP	
Health & Wellness	М	GBY, PKS,	2016-17
Management-	•••	RVF, STP,	2010 17
Collaborative		SUP	
Applied Computing-	В	MIL, OSH,	2017-18
Collaborative	ь	PLT, RVF,	2017-10
Collaborative		STP	
Healthcare Administration	M		2018-19
	IVI	LAC, PKS,	2018-19
-Collaborative		PLT, STO,	
		STP	
Applied Biotechnology-	M	GBY, MSN,	2019-20
Collaborative		OSH, PKS,	
		PLT, STP,	
		WTW	
Infor Technology	M	LAC, OSH,	2019-20
Management-		PKS, STP,	
Collaborative		SUP	
*Academic degree program collaborations between UW-Madison and other UW			

A unique partnership between UW-Eau Claire, Marshfield Clinic, and the Family Health Center of Marshfield, Inc. is expanding to reach more medical patients in need of area resources to meet their underlying social needs. The innovative partnership, called the Community Connections Team, is led by Marshfield Clinic providers through Family Health Center, Inc. and by UW-Eau Claire faculty, aiding community members while giving students experience that helps them pursue work in medical fields and other careers.

UW System institutions also collaborate on common information systems which promote efficiencies and synergies. These include a Human Resource System (HRS), a Shared Financial System (SFS), a digital learning environment (Canvas), and common Student Information System (SIS) software. All UW System institutions provide course transfer information to the Transfer Information System (TIS; see Improvements Made in Transfer of Credit) and admissions, student, financial aid, and curricular data to the Central Data Request (CDR) database. These central sources of information serve as a resource for a wide range of constituencies across the State. In addition,

UW System collaborations include a single library automation system that provides support for systemwide access and delivery of library materials.

Incentive Grants

Program Goals, Results, and Budget

UW Incentive Grants, for projects implemented during the 2013-15 biennium, provided \$22.5 million of UW System funds to support economic and workforce development projects, and projects that improve the affordability of education at UW institutions. Additionally, these awards could be used to advance economic development programs, as defined in s. 36.11 (29r) (a), that have been undertaken.

All UW institutions were invited to submit grant proposals for projects or programs that advanced one or more of the three eligible program activities. These activities include economic development programs, development of an educated and skilled workforce, and programs to improve affordability of postsecondary education.

⁴⁻Year institutions are included.

^{**}Major level: B-Bachelor's, M-Master's, Y-Clinical/Professional Practice Doctorate.

^{***} EAU=Eau Claire, GBY=Green Bay, LAC=La Crosse, MSN=Madison,

MIL=Milwaukee, OSH=Oshkosh, PKS=Parkside, PLT=Platteville, RVF=River Falls, STO=Stout, STP=Stevens Point, SUP=Superior, WTW=Whitewater