# UNIVERSITY OF WISCONSIN SYSTEM Wisconsin and the UW System – Facts and Trends

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# Wisconsin and the UW System – Facts and Trends

## WAR FOR TALENT

Wisconsin is in a war for talent that extends globally. To address this challenge and put it in context, there must be a general understanding of the state's demographics.

#### **Aging Population and Lower Birth Rates**

Wisconsin's population age 60 and older comprise 25% of the state's total. The decade between 2010 and 2020 was projected to measure the fastest and largest growth of 60 and older population due to the largest portion of the baby boomer generation aging into this cohort. (Wisconsin Department of Health Services: <u>https://dhs.wisconsin.gov/aging/draft-23-25-aging-plan.pdf</u>)

At the same time as the population is aging, the birth rate both in Wisconsin and nationwide has been declining, contributing to a reduced available workforce.

Year	Wisconsin	U.S.
2020	10.4	
2019	10.8	11.4
2018	11.1	11.6
2017	11.2	11.8
2016	11.5	12.2
2015	11.6	12.4
2010	12.0	13.0
2005	12.7	14.0
2000	12.9	14.4
1995	13.2	14.6
1990	14.8	16.7
1985	15.4	15.8
1980	15.9	15.9
1975	14.3	14.6
1970	17.5	18.4
1965	20.0	19.4
1960	25.4	23.7
1955	25.0	25.0
1950	23.9	24.1

Birth rate (births per 1,000 population) Wisconsin and the United States, Selected Years 1950-2020

Source: Data for Wisconsin are from resident birth certificates, Office of Health Informatics, Division of Public Health, Wisconsin Department of Health Services.

#### **Declining Number of High School Graduates**

The relatively low birth rate in Wisconsin is directly tied to the decline in the projected number of high school graduates in the state.

Projected percent change in number of high school graduates: 2013-2029



Source: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD). April 2019. https://nces.ed.gov/programs/PES/section-3.asp#3



#### High School Graduate Projections (WICHE, Dec 2020)

Wisconsin's High School Graduate Projections

Source: Western Interstate Commission for Higher Education (WICHE)

#### **Declining Participation Rates**

The impact of the decline in the number of high school graduates on enrollments is further exacerbated by the falling participation rate of high school graduates who go on to college.



Overall, Wisconsin's participation rate is lower than in neighboring states.



\*Sources: Western Interstate Commission for Higher Education (WICHE), UW System Office of Academic Planning & Research

1% is X students

US

340,000

600

1.300

350

1.000

600

Left unchecked, the decline in the number of high school graduates and the declining participation rate will lead to a substantial decline in enrollments.

#### UW System Projected Enrollments (excluding Madison)

#### Main Campus Projections (Fall enrollment, excluding Madison)



Source: UW System

#### **Net Outward Migration**

To further complicate the workforce picture, Wisconsin is projected to experience net outward migration of people.

Recently released figures from the 2020 census indicate that if 2010-2020 migration patterns continue – more people outbound than inbound – the number of working Wisconsin residents will decline by about 130,000 by 2030 based on net migration.

*Forward Analytics: <u>https://www.forward-analytics.net/research/moving-in-exploring-wisconsins-</u> <u>migration-challenges/</u>* 

#### **Areas of Opportunity**

#### Some College, No Degree

In the United States, approximately two million people each year enter postsecondary education for the first time. Eight years later, one-third of those who started have not earned any former credential and are no longer enrolled. This former student population, also known as the "some college, no degree" population, is an important indicator for an economy that demands more workers with education and training beyond high school.

This population also is important as a **source of possible enrollment growth** for postsecondary institutions in many parts of the country that are struggling with recent declines. Former students themselves also reap great personal benefits from obtaining degrees and certificates.

In Wisconsin, the "some college, no degree" population was estimated at 721,678 in 2020.

Through its online program, the UW System can be an invaluable resource for employers, developing programs for in-demand industries providing access to upskilling opportunities.

(Source: "Some College, No Credential," National Student Clearinghouse Research Center, 2022)



#### Number of First-Generation Students



Blue = first-generation students as proportion of overall incoming UW System freshmen

# UW SYSTEM IS TALENT MAGNET

The UW System is the best developer of talent in the state and is positioned – with the appropriate level of investment – to continue to serve as a magnet to attract talent into Wisconsin.

# Fact: 87% of Wisconsin resident graduates of the UW System live in Wisconsin five years after graduation – benefiting the workforce and benefiting Wisconsin.

See the UW System Accountability Dashboard



#### **Economic Impact Measures**

Graduates of UW System universities are well-prepared and well-positioned to succeed in Wisconsin's workforce.

The economic value of a college degree is unassailable. Increased income levels lead to higher earnings and greater ability to invest in our communities.

Data show that educational attainment continues to matter, with income increasing in proportion to education level. Bachelor's degree-holders earn 67% more than those with just a high school diploma and 39% higher than those with an associate degree. (*Sources: American Community Survey*)

### **Earnings and Unemployment**

Earnings and unemployment rates by educational attainment, 2020				
Educational attainment	Median usual weekly earnings	Unemployment rate		
Doctoral degree	\$1,885	2.5%		
Professional degree	1,893	3.1		
Master's degree	1,545	4.1		
Bachelor's degree	1,305	5.5		
Associate degree	938	7.1		
Some college, no degree	877	8.3		
High school diploma, no college	781	9.0		
Less than a high school diploma	619	11.7		

Note: Data are for persons age 25 and over. Earnings are for full-time wage and salary workers. Source: U.S. Bureau of Labor Statistics, Current Population Survey.

#### **World-Class Research**

The UW System is committed to research that helps promote economic, social, and cultural development on all our campuses.

The UW System is a major source of research and innovation, with more than \$1.1 billion of sponsored research activity annually across our 13 universities.

See UW System <u>Accountability Dashboard</u>



The UW System receives research funding from a broad range of federal agencies.





FEDERAL AWARDS (without Madison): \$231,343,758

## ACCESS AND AFFORDABILITY: BEST VALUE IN THE UPPER MIDWEST

**Tuition Changes** 



19.1%

16.8%

14.7%

6.4%

24.6%

0%

UNIVERSITY OF WISCONSIN SYSTEM

University of Illinois - Chicago

University of Cincinatti

Georgia State University

University of New Orleans

Average Increase of Milwaukee Peers (FY14 - FY23):

University of Wisconsin - Milwaukee







# Financial Aid and Student Investment: Working to Increase Access and Affordability

Financial aid funding is critical to student success as it plays an integral role in student access, retention, graduation, and ultimately, employment.

- In 2021-22, almost two-thirds (66 percent) of UW System undergraduates, or 102,000 students, received some form of financial aid. Undergraduate and graduate students received nearly \$1.5 billion in financial aid in 2021-22 (the most recent year for which data are available), including \$668 million in grants, \$646 million in loans, and \$10 million in work-study funding.
- In the UW System during the 2021-22 academic year, 55,000 undergraduates and 8,700 graduate students received a student loan. The Pell Grant program provided \$113 million to over 26,000 Wisconsin resident undergraduates (23 percent of resident undergraduates), with an average grant over \$4,000.
- In 2021-22, Wisconsin resident undergraduates in the University of Wisconsin System faced an average unmet need of \$5,337 after accounting for family contributions and financial aid.
- In 2021-22, the federal Supplemental Educational Opportunity Grant (SEOG) program awarded over \$12 million in grants to over 16,000 students.



PELL Grant, Wisconsin Grant, and Institutional Grant to Undergraduates and Percent Awarded

**Average student loan debt** has declined over the past 10 years on both an actual and inflation-adjusted basis.

Moreover, a smaller percentage of students is carrying debt – 64 percent in 2020-21 compared to 72 percent five years earlier.



Source: UW System Office of Policy Analysis and Research

UW graduates, especially those attending four-year campuses, are far less likely to default on student loans within three years compared to students nationally.



STUDENT LOAN DEFAULT RATES

Source: UW System Office of Policy Analysis and Research

## CHALLENGES FACING UW UNIVERSITIES

#### **Trailing the Competition**

State support for higher education in Wisconsin is lagging peers.



### State support for higher ed: 10 Years

#### Wisconsin Drops in Spending Rank for Higher Education

Adjusted Total Revenue (Taxes plus Net Tuition) Per FTE Student by Midwest State



Source: State Higher Education Executive Officers (SHEEO), which adjusts for inflation, enrollment mix, and regional cost of living.

**State Funding in Wisconsin for Higher Education Varies by Type of Campus** According to an April 2023 report by the **Wisconsin Policy Forum**, "<u>Higher Education</u> <u>Funding Stabilizes Overall, but Enrollment Still Falling</u>," Wisconsin's funding levels vary sharply by type of campus.

"Two-year public colleges in the state – essentially the Wisconsin Technical College System (WTCS) campuses – received \$17,153 per pupil in state and local tax and tuition funding 2021. That was fifth highest in the nation and was well above the U.S. average of \$11,714.

"Funding for four-year campuses in Wisconsin, however, was \$15,079 per pupil, which ranked 43<sup>rd</sup> nationally and was well below the U.S. average of \$17,733."

←

#### State Funding To UW Lags



State taxes or funding have fallen from the number one source of revenue for the UW System in 2010 to the number three source today. The decline matters because compared to most other revenues UW officials have far more discretion in how they can spend state tax dollars.

#### 2019 UW System Revenues by Source

Federal Grants and Contracts \$1,564M in 2019	<b>Tuition</b> \$1,534M in 2019 24.2% of total revenues	<b>State Taxes (GPR)</b> <b>\$1,123M</b> in 2019 <b>17.7%</b> of total revenues Change since 2009: - <b>5.6</b> %	Gifts and Trust \$646M in 2019 10.2% of total	Other* \$547M in 2019 8.6% of total revenues
Change since 2009: +60.2%	Change since 2009: <b>+56.4</b> %	Auxiliary (dorm fees, food service) \$934M in 2019 14.7% of total revenues Change since 2009: +37.8%	revenues Change since 2009: <b>+20.2</b> %	Change since 2009: +48.2%

#### 2018 Wisconsin Technical College System Revenues by Source

State Taxes (GPR) \$518M in 2018 33.0% of total revenues	Property Taxes \$447M in 2018 28.5% of total revenues	<b>Other*</b> <b>\$299M</b> in 2018 <b>19.1</b> % of total revenues Change since 2008: <b>+20.6</b> %
Change since 2008: <b>+280.3</b> %	since 2008: <b>+280.3</b> % Change since 2008: <b>-34.4</b> %	<b>Tuition</b> <b>\$258M</b> in 2018 <b>16.5</b> % of total revenues Change since 2008: <b>+32.8</b> %

Source: Legislative Fiscal Bureau

\*Other: UW System includes federal indirect cost reimbursements and fees for certain programs (operational receipts); Tech College System includes self-financing operations and aids to individuals and organizations.

According to the Legislative Fiscal Bureau, the Technical College System receives 58.5% of its revenue from Wisconsin taxpayers as compared to 17.7% for the UW System.

#### **Relative Compensation Compared to Market**

The UW System is not keeping pace with market competition for its faculty and staff, which leads to recruitment and retention challenges.

#### See UW System Accountability Dashboard



#### FACULTY & STAFF



UW Institution/Cluster UWS excluding UW-Madison

Year 2009-10 to 2020-21

Faculty designation includes Professor, Associate Professor, and Assistant Professor titles. Compensation is adjusted for cost of living using the Economic Research Institute index. See Technical Notes for peer institutions and methodology.



#### As of Fall 2021, the UW System had 40,333 employees (including 5,493 faculty).



#### Pay Plan: Universities Cover 30% of Pay Plan

Unlike other state entities, UW System pays 30% of a compensation increase to its faculty and staff as opposed to the state picking up 100% of that amount. This has resulted in a burden for our universities, which has been exacerbated during a 10-year tuition freeze.



#### **Tuition Freeze Created a \$50 Million Hole in University Budgets**

This has resulted in a nearly \$50 million hole for our universities since fiscal year 2019, which will only increase with any pay plan increases.





#### **GPR/Tuition Balances**

GPR/Tuition balances have generally continued to trend downward since 2013. FY21 and FY22 were positively impacted by the influx of one-time COVID support dollars from the federal government.



#### **Unsustainable Structural Deficits**

A structural deficit exists when ongoing expenses exceed recurring revenue. In the event of a deficit, budgets remain in balance at the end of the fiscal year only through allocation of reserve dollars. With reserve dollars, campuses can have a balanced budget every year and still have an ongoing structural deficit; however, this is not sustainable over the long term.

#### For FY 2023, 11 of the 13 UW universities have self-reported an existing structural deficit.



Many of our universities are eating into reserves in an unsustainable fashion as actual revenues from tuition and fees fell below budgeted amounts in FY22 by over \$30 million for universities excluding UW-Madison.



#### UW System Forecasted Ending Balances as of December 2022



























#### **Aging Infrastructure**

The University of Wisconsin System, like many of its peers, saw an unprecedented spike in construction following the return of GI's from war. Facilities went up fast to keep pace with the increased enrollment many institutions faced at the time. Energy conservation was not a factor in those years – oil was cheap and seemingly plentiful. These buildings weren't meant to last. Although the average percentage across higher education nationally is closer to 33% of the total inventory, UW System estimates that more than half of its facilities were built in this era.



Building systems don't last forever. They require cyclical maintenance and eventual replacement. Sightlines recommends that electrical systems be replaced every 25 years, HVAC every 30, and plumbing every 35. Many of our buildings, constructed between 1950 and 1975, have NEVER had their electrical, HVAC, plumbing or exterior envelope replaced or repaired. One thing not factored into a typical capital renewal program is the probability that newer buildings, which have more computerized systems and controls, will require upgrade and replacement on a more frequent basis than older valve/dial systems.



The longer we wait to address deferred maintenance and other capital renewal needs, the more expensive the fixes become and failure is more likely, which diverts existing resources, such as staff and funding, to resolve those "emergencies."

### Relationship Between Different Maintenance Activities\*



\*EAB – Tackling the Deferred Maintenance Crisis – Executive Briefing

#### 2023-25 Capital Budget Request

Biennially, each state agency is required to submit a two-year capital budget request within the context of a long-range plan to the Department of Administration (DOA) in September of even-numbered years. The two charts below delineate the actual funding of UW System capital budgets from 2001 to 2022 of General Fund and Program Revenue Supported Borrowing. The 2023-29 figures represent the proposed request for the two funding types.



**General Fund Supported Borrowing Trend** 

All Figures Shown in Millions



**Program Revenue Supported Borrowing Trend** 

All Figures Shown in Millions

The proposed Capital Plan includes 16 major projects, six of which were previously approved by the Board as part of the 2021-23 Capital Budget request but were not enumerated by the Wisconsin Legislature.

In addition, the legislature did not provide funds for the Instructional Space Program in the 2021-23 Capital Budget. A total of 15 projects requested for the 2023-25 were previously approved by the Board in August 2020. This plan provides for the following distribution by the total cost of work:



The 2023-25 budget request proposes to renovate 4.9 million or 7% of the 69 million square feet comprising the University of Wisconsin System; to demolish about 892 thousand square feet; and to add about 762 thousand <u>new net square feet</u>. More than half of the UW System's building inventory was constructed between 1950 and 1979, and a substantial proportion of that inventory has had little renovation or upgrade since its inception. Forty-four percent of the overall inventory is rated in moderate or poor condition regarding functionality and condition assessment.

Nearly 1,230 million GSF of the proposed new construction will replace 667 thousand GSF of existing buildings. The proposed projects have undergone feasibility assessments and it was determined that new construction is reasonable because the existing facilities:

- Are obsolete functionally, physically outdated, and approaching end of useful life;
- Are unable to be renovated to meet new functional requirements due to existing floor loading or ceiling-to-ceiling heights;
- Contain structural systems that are unable to be modified for new configurations; or
- Are too costly to renovate due to that cost exceeding 75% of the building's value.

# ACTION UW SYSTEM HAS TAKEN

#### **Addressing Workforce Demand**

There is no question that Wisconsin employers are feeling the pinch of a limited supply of highly skilled and trained workers. Unless action is taken to address the issue, many of these jobs will leave the state and companies will not move operations to Wisconsin because of the workforce shortages. These actions will have the direct result of reducing the economic prosperity of the state.

See UW System's Labor Market Analytics dashboard

#### **Shortfalls in High-Demand Fields**

The healthcare and social assistance sector will be the largest single employer in Wisconsin by the end of the decade. This sector will exceed the manufacturing sector in that period, the largest industrial area since at least the 1960s (and likely since the Second World War). It is a fundamental shift in the focus of Wisconsin's economy. This area will employ close to half a million people (461,000) and includes a disproportionately high number of people needing post-secondary credentials.

- Nurses/Healthcare: Nurses are the largest single shortfall area among those requiring post-secondary education. This is true for both Wisconsin and the nation. Wisconsin has a <u>shortfall against demand</u> of more than 500 per year in this area. Programs are costly to expand and maintain.
  - Shortfalls also exist in other critical health professions that are primarily educated at UW institutions. Key occupations include nurse practitioners (170 per year), physicians (80), physical therapists (70), and occupational therapists (35). Adding and expanding programs in these areas remain constrained by cost and other factors.
- Teachers: Demand for teachers remains high for some areas as turnover remains a challenge. This is coupled with slowing demand due to demographic shifts.
  Specifically, demand is not being met for a variety of secondary school teachers (80 per year), special education teachers (30), and pre-school/kindergarten teachers (20).
- Computer Science: Computer science fields continue to grow and outgrow current program productions. Each year, demand exceeds supply for software developers in Wisconsin creating a shortfall of nearly 300 positions. Overall demand exceeds supply in more specialized areas in 14 of 15 areas of computer science occupations with information security analysts (50 per year) and quality assurance analysts (40 per year) as two of the more significant examples.

 Engineering: With virtually no exceptions, UW and other Wisconsin higher education institutions fail to meet workforce demand for engineers. Annual shortfalls of civil engineers (30 more needed per year), electrical engineers (30), mechanical engineers (65) and most critically industrial engineers (120). Total production of all UW engineering programs is around 2,500 annually.

**UW System is responding to market demand by offering more programs in these high-demand fields** and the corresponding growth in the number of degrees awarded in these high-demand fields reflects that commitment.



#### ECONOMIC DEVELOPMENT



### Percent of Degrees in STEM and Health Fields

#### Health Professions and Related Programs



#### **Degrees and Certificates**

#### Computer and Information Sciences and Support Services



#### Degrees and Certificates

#### Engineering

#### **Degrees and Certificates**



The UW System also has taken proactive action to address its fiscal situation.

#### **Campus Efforts to Reduce Costs**



#### **Other Reforms**

#### **Program Array**

Between July 1, 2017, and June 30, 2022, 196 single institution new academic programs were approved by the Board of Regents and 107 programs were suspended or eliminated from the UW System academic program array. The figure below illustrates how these programs cluster into major groupings.



#### **Collaborative Programs**

Many UW institutions work collaboratively to offer and deliver academic degree programs. In a collaborative program model, each partnering university offers the academic degree program to its students and contributes a portion of the coursework and student support services. In most but not all cases these programs are delivered with administrative support from UW System Extended Campus. A collaborative program enables universities to leverage and combine faculty and student support resources to deliver high need programs in a distance delivered format.

 Between July 1, 2017, and June 30, 2022, 37 new collaborative academic degree programs were added to the UW System program array and 10 programs were suspended or eliminated.

#### Shared Services

Today, UW Shared Services provides more than 35 services within human resources and broader business functions – all of which are now done centrally rather than locally at each campus. To generate further efficiency and effectiveness across the system, the following are currently underway:

- o Standardizing HR and Finance business processes within and across all campuses;
- Using the Administrative Transformation Program (ATP) project as the mechanism to drive the standardization and transformation;
- Establishing the new operating model for all HR and Finance service delivery where processes are centralized unless more effectively or efficiently done at the campus level;
- Re-defining the impacted workforce as these changes occur;
- Empowering employees through expanded use of self-service functionality in ATP (also creating efficiency in HR and Finance); and
- Creating performance metrics for each service.

Additional examples of efforts toward standardizing and centralizing:

- A central investigative unit for Title IX and harassment Office of Compliance and Integrity (OCI)
- IT as a Service (ITaaS) Office of Learning & Information Technology Services (OLIT)
- Regional travel support Finance

#### Maintaining Strong Humanities Program Is Critical

While a lot of attention is directed toward growing the number of STEM and healthcare graduates, it is vitally important not to overlook the humanities.

Researchers from the <u>Strada Institute for the Future of Work</u> and labor market analytics firm Emsi recently analyzed over 36 million resumes and found that liberal arts graduates have significant advantages in the labor market of tomorrow. Specifically, they found that the skills traditionally associated with liberal arts programs – such as critical thinking, communication, and creativity – are among the most in-demand by employers, and that graduates of liberal arts institutions show the fastest wage growth in their 30s and 40s. (<u>Source</u>: CNBC)

An estimated 12% of top CEOs in 2018 have liberal arts degrees. (Source: Flex CollegePrep)