



Higher Education in Wisconsin A 21st Century Status Report

A Benchmark to Measure Future Success

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What does the future hold for Wisconsin's economy?

The answer depends on the ability of our workforce to compete for the jobs of tomorrow – not only regionally and nationally, but globally. As this benchmark study shows, the majority of future middle class jobs will require more than a high school education. The challenge presented by low academic persistence among low-income students must be addressed if Wisconsin is to ensure a skilled workforce is in place to lead the state's economy in the years ahead. Wisconsin's economy, families, and children will prosper only if private industry and the government commit to increasing investments in higher education, particularly for low-income students.

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Forward

Wisconsin is standing at an economic crossroads. The state has weathered the national recession better than most states. Yet data outlined in the following pages of this report show that in order to meet the needs of today's businesses and position Wisconsin for long-term economic success, new and more coordinated investments in higher education will be necessary.

Employers are already seeking more workers with education beyond high school to fill middle-class jobs – jobs that even recently did not require that level of education. Projections show this trend continuing to grow as economic needs increasingly require a workforce with more than just a high school diploma. At the same time, the fastest-growing demographic groups in the state are the least likely to go on to college. As it stands today, low-income students in Wisconsin are typically less likely to succeed in high school and less likely to pursue higher education. These are formidable challenges, but through new and more coordinated investments in education, Wisconsin can meet today's workforce demands and drive the state's economy in the years ahead. Now is the time to start the conversation and lay the foundation for Wisconsin's future economic success.

But government cannot achieve this alone. Businesses have a vested interest in the future of Wisconsin's workforce and must play a significant role in achieving meaningful educational improvements. The state and private industry must collaborate to make smart investments that will benefit the state, its residents, and its businesses.

I hope you find this report enlightening.

Richard D. George, Chair
Wisconsin Covenant Foundation, Inc. Board of Directors





Overview

For generations, Wisconsin has been known for its commitment to building a skilled workforce through investments in its higher education system. From the University of Wisconsin System and the Wisconsin Technical College System to the state's great private colleges and universities, there are innovative higher education programs in every corner of the state.

Wisconsin is now at a crossroads and faces a critical choice – to expand upon and better coordinate existing public and private higher education investments or risk long-term economic consequences.

Today's jobs already require more than just a high school degree – even in areas such as manufacturing in which a high school degree has previously been sufficient. Occupational projections indicate this trend will only grow for future middle-class jobs. Without a significant investment in education by state government and private industry, Wisconsin will fall behind and lose out on economic opportunities.

Wisconsin faces several demographic challenges in addressing this issue. Like many states, the school-aged population is not growing at a rate sufficient to replace the baby boomers exiting the workforce. Additionally, the fastest-growing portions of the state's population are the least likely to go on to college. Among several demographic groups, academic persistence – the ability to graduate from high school and an institution of higher education – is a serious concern.

Wisconsin's ability to meet the workforce demands of employers, and the ability to position the state for future economic success, depends on improvements in several areas:

- Increasing educational achievement levels among low-income students at the K-12 level.
- Increasing access to higher education for key demographic groups that traditionally do not attend college, particularly low-income students.
- Assisting traditional and non-traditional students in navigating the college preparation and application process, regardless of income.

Businesses are already demanding some form of higher education. Improvements in the educational achievement of low-income students and students who would not traditionally attend college will be key factors in the state's long-term economic success. They will be the machinists, nurses, laborers, builders, and engineers of tomorrow. They will manufacture high-quality goods, conduct research, make medical breakthroughs, and bring goods to the global marketplace. They will all require a higher education. Given increasing skill requirements, the importance of education to workforce preparation has never been clearer.

In order to improve the state's economic outlook, meet the needs of private industry, and improve the quality of life for all its citizens, Wisconsin must increase public and private investments in education, and achieve better coordination of those investments.



Education is the cornerstone of Wisconsin's future economic success



The significance of education for economic prosperity and social well-being is widely recognized. A growing body of economic research demonstrates the increasing importance of educational attainment to national economic well-being. Changes in the nature of work through the twentieth century, and into the twenty-first, have bolstered the demand for higher-order skills and boosted the wages that skilled workers command.

In order to successfully compete for new jobs, Wisconsin must commit to increasing its investment in the education of the state's workforce. While tax structure and business incentives are certainly a factor in recruiting and retaining businesses to any state, the quality of a state's workforce is of critical importance. Wisconsin has a highly educated, highly skilled, and motivated workforce. This fact helps explain why in 2009 Wisconsin ranked first in the nation for the percentage of manufacturing jobs, passing states like Indiana, Michigan, and Ohio.¹ Major businesses have located in Wisconsin, stayed in Wisconsin, and invested in Wisconsin in large part due to the quality of our workforce. Wisconsin's economic success is based on the ability of students from all economic backgrounds to achieve an education beyond high school.

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The evidence on earnings and income highlights a clear link between education and economic prosperity. We explore this issue in greater detail by describing workforce trends, starting with key indicators such as overall employment and unemployment. Because we are mainly interested in the role of postsecondary education as it relates to a vibrant state economy, we then “drill down” and consider the specific occupations where job growth is greatest – along with the education levels those jobs require and the benefits of the education. As we show, the job growth is fastest and salaries are highest in occupations that have postsecondary education requirements. Last, we provide some indication of the benefits of a highly educated workforce to the state as a whole.

MANY MIDDLE CLASS JOBS WILL SOON REQUIRE A HIGHER EDUCATION

To set the stage for our discussion of future workforce needs, we review Wisconsin's industries and their respective proportion of the workforce. As Table 1 shows, education and health care top the list, comprising nearly one-quarter (22 percent) of Wisconsin's workforce. Manufacturing follows closely with 19 percent of the workforce, with retail being the third largest group at 12 percent, while the rest of the industries fall into single digits.

Table 1. Employment by Industry of Wisconsin's Working Population Age 16+

Percentage of Workforce	No. of Workers	Industry
22%	620,826	Educational services, health care, and social assistance
19%	543,797	Manufacturing
12%	333,950	Retail trade
8%	234,795	Arts, entertainment, and recreation; and accommodation and food services
7%	214,548	Professional, scientific, and management; and administrative and waste management services
6%	183,540	Construction
6%	180,213	Finance and insurance, and real estate
5%	130,006	Transportation and warehousing, and utilities
4%	114,928	Other services, except public administration
3%	96,523	Public administration
3%	90,430	Wholesale trade
2%	71,537	Agriculture, forestry, fishing and hunting, and mining
2%	58,303	Information (media related)



Source: 2005-2009 Period Estimate, American Community Survey, U.S. Census Bureau.

Note: Percents may not add to 100 due to rounding.

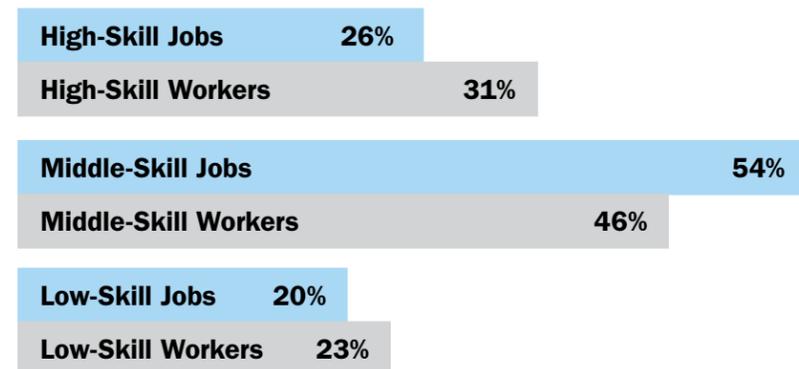


The evidence on earnings and income highlights a clear link between education and economic prosperity.

According to recent estimates, 54 percent of Wisconsin's current jobs require more than a high school diploma but less than a four-year college degree, and carry wages over \$10/hour or an annual average salary of about \$20,000 – what analysts term “middle-skill” jobs. However, the supply of workers with these skills currently comprises only 46 percent of the workforce. Positions in the construction, manufacturing, and transportation industries make up a large portion of this category.²

Middle-skill jobs are an important part of Wisconsin's economic future, making up nearly half of the projected job openings in coming years. In comparison, jobs requiring less education will constitute the smallest portion (one-fourth) of job openings, while those requiring at least a four-year degree will account for 29 percent of openings.³ Additionally, although the number of middle-skill workers is projected to increase by almost two percent, this will not address current employer needs as shown in Figure 1.⁴

Figure 1. Wisconsin's Jobs and Workers by Skill Level: 2007



Source: Center on Wisconsin Strategy. Wisconsin's Forgotten Middle-Skill Jobs.

Not only will middle-skill jobs be half of the projected job openings, but they are a significant portion of the fastest-growing occupations in Wisconsin. Table 2 shows that five of the top thirteen fastest-growing jobs are middle-skill. In this changing economy, a college credential will be the norm; more than half of the fastest-growing occupations require at least an associate degree.

Table 2. Fastest-Growing Occupations in Wisconsin: 2006–2016

Occupational Title	Estimated Employment ⁽¹⁾				Typical Education and Training Path ⁽²⁾	2006 Average Annual Salary ⁽³⁾
	2006	2016	Change	% Change		
Network Systems & Data Communications Analysts	5,150	7,390	2,240	43.5%	Bachelor's degree	\$58,042
Home Health Aides	16,550	23,310	6,760	40.8%	Short-term on-the-job training	\$20,812
Personal & Home Care Aides	22,030	30,540	8,510	38.6%	Short-term on-the-job training	\$19,602
Computer Software Engineers, Applications	8,830	12,170	3,340	37.8%	Bachelor's degree	\$69,811
Medical Assistants	7,120	9,720	2,600	36.5%	Moderate-term on-the-job training	\$27,632
Personal Financial Advisors	3,170	4,190	1,020	32.2%	Bachelor's degree	\$74,784
Dental Hygienists	4,170	5,470	1,300	31.2%	Associate degree	\$55,069
Dental Assistants	5,340	6,960	1,620	30.3%	Moderate-term on-the-job training	\$29,454
Social & Human Service Assistants	7,340	9,400	2,060	28.1%	Moderate-term on-the-job training	\$29,355
Pharmacy Technicians	6,300	8,030	1,730	27.5%	Moderate-term on-the-job training	\$25,518
Computer Software Engineers, Systems Software	2,840	3,600	760	26.8%	Bachelor's degree	\$74,640
Registered Nurses	51,130	64,550	13,420	26.2%	Associate or Bachelor's degree ⁽⁴⁾	\$57,376
Physical Therapists	4,060	5,080	1,020	25.1%	Master's degree	\$64,087

Source: Office of Economic Advisors, Wisconsin Department of Workforce Development, May 2008.

Notes:

(1) Employment is a count of jobs rather than people, and includes all part- and full-time nonfarm jobs.

(2) Typical Education and Training Path gives a general indication of the education or training typically needed in the occupation. There may be other pathways into the occupation, as well as additional educational, training, or licensing requirements.

(3) Average Annual Salary: An occupation's average hourly wage is calculated by summing the wages of all employees in a given occupation and then dividing by the total number of employees in that occupation. In most cases, the annual average salary is equal to the average hourly wage multiplied by 2,080.

(4) Either a bachelor's or an associate degree is accepted in this occupation. It depends on the specifics of the position and the employer.



A robust Wisconsin economy promising employment opportunities and an environment suitable for business growth depend on a skilled workforce.

These figures demonstrate a significant opportunity to meet current employment needs while increasing the earning potential of those presently working in low-skill jobs. As this report shows in the following sections, this can be achieved by increasing high school achievement and higher education access amongst low-income students.

A robust Wisconsin economy promising employment opportunities and an environment suitable for business growth depend on a skilled workforce. And there is some reason for optimism – Wisconsin has witnessed positive changes in the educational attainment of its workforce in recent years. As Table 3 shows, the biggest shift in the supply of workers was among those with less than a high school diploma, a group that experienced a significant reduction in numbers due to the combination of retirements of less educated workers and a decline in young adults dropping out of high school. Workers with a college degree experienced the greatest increase in supply.

Table 3. Wisconsin Labor Force by Educational Attainment, Population Aged 25+: 2006 to 2009

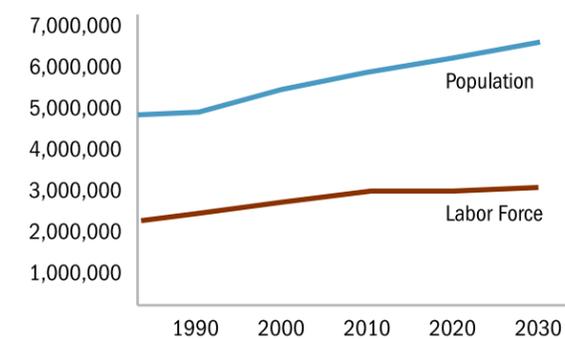
Education	2006	2009	Percent Change
Less than High School	279,880	252,031	-10.0%
High School Graduate	1,281,556	1,282,725	+0.1%
Some College	721,796	789,948	+9.4%
Associate Degree	324,072	338,549	+4.5%
Bachelor's Degree	614,999	647,005	+5.2%
Graduate or Professional Degree	309,341	315,979	+2.1%

Source: 2006 ACS 1-year estimates, 2009 ACS 1-year estimates.



Despite this, obstacles do remain. The state's population is growing, but the labor force is leveling off as is shown in Figure 2. This is partly because the fastest-growing portion of the state's population is its older residents. While we are primarily concerned with the education and productivity of those workers we do have, a stagnant workforce population does make it more difficult for the state to meet its obligations to retirees because the number of workers putting tax dollars into the system will decline.⁵ Quality education is one way to offset these demographic and economic shifts.

Figure 2. Population and Labor Force in Wisconsin: 1990–2000 Estimated and 2000–2030 Projected



Source: Dennis Winters, 2009 "Chief Labor Economist for Wisconsin Department of Workforce Development" WISCAPE forum, Madison, Wisconsin.

Higher education a benefit for employees, employers

Educational requirements for many jobs have continued to increase, work is becoming more specialized, and quality standards are on the rise.

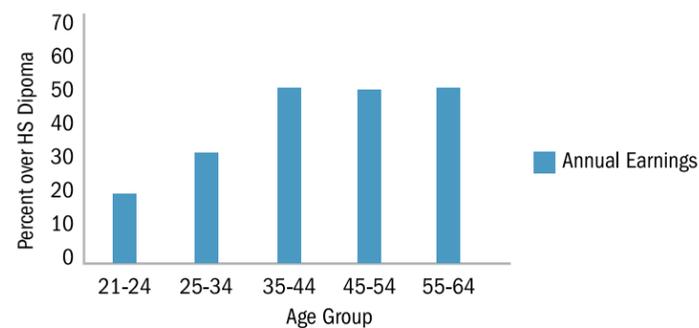
The previous section demonstrated how increasing the number of Wisconsin workers with some form of a higher education is becoming critical to meeting the workforce demands of today's employers. In the years ahead, this trend will only continue to grow. To compete and succeed in a global marketplace, Wisconsin businesses will rely more and more on a highly skilled, highly educated workforce.

Educational requirements for many jobs have continued to increase, work is becoming more specialized, and quality standards are on the rise. Technology is now part of many jobs that previously did not require it. Even the jobs now considered the "old economy" – in manufacturing – are now requiring more advanced skills to use robotics and other high precision equipment. In addition to being a critical element for the success of Wisconsin businesses, a higher education offers significant benefits to workers.

Today's economy is more dynamic than ever. Workers have to be agile and adjust to changing circumstances. Few workers spend their entire careers working mainly in their field of formal training. Part of the purpose of formal education is to help students learn to adjust to new work demands prior to entering the workforce.

There are clear economic advantages for workers with a higher education, as is demonstrated in Figure 3. Bachelor's degree holders are more likely to be employed and earn much more than other workers, and this holds for every age group. Adults holding bachelor's degrees earn 19 percent more than high school graduates when they first enter the workforce, and that advantage grows to 50 percent for older workers. The fast growth in the earnings premium that comes as workers gain more experience reinforces the idea that bachelor's degree-earners learn more quickly and become more productive – yielding greater earnings. This is not simply the result of a higher degree leading to a better job, because the bachelor's degree premium occurs within occupations as well.

Figure 3. Bachelor's Degree employment and Income Premiums Relative to High School Diploma in Wisconsin



Source: U.S. Census Bureau



Beyond being more employable, workers with a higher education earn more than those without. All forms of postsecondary education accrue economic benefits.

Educated workers are also more likely to be employed. Bachelor's degree holders have fared more than twice as well as high school graduates in the recent economic downturn. The unemployment rate for those with only a high school diploma was 10.3 percent in 2010 and only 4.7 percent for those with a bachelor's degree.⁶ Furthermore, at any age an employed worker with a four-year degree has an enormous wage advantage over a high school graduate (Figure 3).

Beyond being more employable, workers with a higher education earn more than those without. All forms of postsecondary education accrue economic benefits (Table 4). An individual with a high school diploma makes 38 percent more than someone with less than a high school diploma. The National Bureau of Economic Research reports that individuals with associate degrees earn almost three dollars more per hour than an individual with some college. It also reports that a bachelor's degree holder earns more than six dollars more per hour than someone with an associate degree in Wisconsin in 2007.⁷ As noted earlier, job growth is fastest in occupations requiring a college credential and wage premiums are higher.

Table 4. Educational Attainment of the Wisconsin Adult Population Ages 25 and Older, and Associated Level of Per Capita Income: 2008

	Annual Income	Number of Workers	Percent Income Advantage over Next Lowest Degree Level
Less than High School	\$21,265	389,591	~
High School Diploma	\$29,352	1,264,002	38%
Some College	\$34,478	808,721	17%
Associate Degree	\$38,526	330,632	12%
Bachelor's Degree	\$51,742	642,270	34%
Master's and Above	\$77,162	323,394	49%

Source: U.S. Census Bureau, 2008 American Community Survey and 2007 ACS 1-Year Estimate
Note: Percents may not add to 100 due to rounding.

The previous section of this report demonstrated that many current employment opportunities require a higher education for middle-class jobs – even in fields like manufacturing. This is only projected to grow in the future. In order to meet the needs of employers and generate new business development in Wisconsin, greater and more focused investment in education will be necessary. In addition to meeting the growing needs of employers, increasing educational achievement will provide greater standards of living for Wisconsin residents.

Wisconsin's long-term prospects: K-12 education

The state's economic future relies heavily on the success of today's educational systems. This report demonstrates employers' needs for an educated workforce, and the individual benefits of a higher education. Without question, any achievements in higher education must coincide with student success at the K-12 level. In this section, we examine the state of K-12 education in Wisconsin.

TRENDS BY KEY DEMOGRAPHICS

To better understand the challenges and opportunities that lie ahead, we must first understand some of the key factors in the educational achievement of Wisconsin students – namely demographic trends.

According to the U.S. Department of Education, Wisconsin can expect only a small increase in public school enrollment (2.2%) between 2006 and 2018. Total PreK-12 enrollment is approaching one million and high school enrollment is nearly 325,000 students. An average 81,000 students per grade level provides some sense of the likely number of people entering the workforce each year.

Wisconsin is also expected to see a decrease in the number of high school graduates – just over one percent fewer graduates from 2005–2019. Other Midwestern states like Minnesota and Ohio are projected to have small or no change in the number of high school graduates. However, Iowa (3.5%), Illinois (6.8%), and Indiana (15.1%) expect to see growth in their number of graduates (see Table 3 in the Appendix).

As the total numbers have declined somewhat, the racial/ethnic composition of Wisconsin students grows increasingly diverse. While white students continue to be the largest group, they make up a declining share. The second largest group is African-Americans, who are currently more than ten percent of the total population and growing. The fastest growing group, Hispanics, has doubled in size in just a decade.⁸



Job growth is fastest in occupations requiring a college credential and wage premiums are higher.

Increasing the likelihood for education success amongst Wisconsin's disadvantaged youth will help boost the state's standard of living, and meet the demands of the state's employers.

Across all racial groups, growing up in poverty is a significant factor in determining whether a high school graduate will attend college and adequately prepare for the fastest-growing careers. Students who come from low-income households often have less educational success, are less likely to attend college, and therefore are less likely to be well-educated workers in the future.⁹ This challenge affects the entire state since the majority of Wisconsin households with children fall in the lowest income brackets. According to the Wisconsin Department of Public Instruction, 50 percent or more of students in 95 of Wisconsin's 424 public school districts qualified for free or reduced-price school meals, up from 72 districts last year. Eight districts have subsidized meal eligibility rates of 70 percent or more. Sixty-three districts had eligibility increases of 20 percent or more from the last school year. The significant number of students considered disadvantaged places a strain on every school district.¹⁰

As shown in Table 5, recent data from the Wisconsin Department of Public Instruction indicates that more than 40 percent of all public school students in the state are eligible for free or reduced-price meals due to household income.

Table 5. Free or Reduced-Price Meal Eligibility; Public School Districts Only

School Year	Percent Eligible
2003-2004	29.5%
2004-2005	30.5%
2005-2006	31.1%
2006-2007	32.4%
2007-2008	33.4%
2008-2009	35.5%
2009-2010	39.0%
2010-2011	41.4%

Source: DPI Press Release, More than 40 percent of students qualify for free or reduced-price meals, March 10, 2011.



Ensuring low-income students have every opportunity to succeed in high school is a crucial first step toward increasing higher education levels within this demographic. (See Tables 5 to 7 in the Appendix for a comparison of test results between students who are economically disadvantaged and those who are not.) As was discussed previously, low-skill jobs are projected to constitute the smallest portion of job openings in the future. At the same time, middle-skill jobs are projected to make up more than half of future openings. Increasing the likelihood for educational success amongst Wisconsin's disadvantaged youth will help boost the state's standard of living, and meet the demands of the state's employers.

In addition to addressing the issue of academic persistence amongst low-income students, Wisconsin's leaders must also commit to addressing the achievement gap across racial demographics. While the state's on-time high school graduation rate is much higher than the national average, that accomplishment conceals one of the largest black/white achievement gaps in the nation (see Table 2 in the Appendix).¹¹ Only 49 percent of black students graduate from Wisconsin high schools on time compared to 86 percent of white students.¹²

Ultimately, the long-term demographic trends for Wisconsin present a challenge to policymakers and leaders of the state. The school-aged population is not growing at a rate at which it can replace the exiting baby boomers, but its citizens are growing more diverse. Fewer Wisconsin high school graduates will mean challenges in meeting workforce demands without significantly increasing college continuation rates, especially for low-income students.

Higher education in Wisconsin

Wisconsin's collection of prestigious institutions of higher learning provides great opportunities for traditional and non-traditional students across the state. Today, more Wisconsin students are enrolled in one of the three sectors than at any time in the state's history.¹³ Those three sectors include the University of Wisconsin System (UW), the Wisconsin Technical College System (WTCS), and the state's network of private colleges and universities. Breaking the figures down, more than 80 percent of undergraduates enroll in the UW and WTCS.¹⁴ In addition, more than 73,000 students receive an education from one of the state's 73 private colleges and universities each year.¹⁵

TRENDS IN SIZE AND COMPOSITION OF THE COLLEGE-GOING POPULATION

As discussed earlier in this report, in order to meet the requirements of tomorrow's employers, Wisconsin needs to grow, graduate, and retain more students with college credentials. It faces several challenges in doing so.

College enrollment has consistently expanded across the nation for decades, and this is also true in Wisconsin. Since 1998, enrollment in the UW grew by approximately 10,000 Wisconsin residents.¹⁶ Enrollment in WTCS shifted during that period – overall headcount shrank while full-time equivalent enrollment grew.¹⁷ Enrollment in Wisconsin's private colleges and universities has increased as well. Today, at least 635,000 students are attending some form of postsecondary education in the state.¹⁸

That said, in an age where college is becoming the norm for the middle class, the college continuation rate for high school graduates (61%) places the state at twenty-eighth in the nation, down from seventh thirty years ago.¹⁹





Similar to the K-12 sector, Wisconsin’s colleges have also seen a change in the composition of their students. Minority enrollment in the UW grew by over 32 percent in the last decade, and during that time enrollment of African-Americans in the private sector swelled by 45 percent.^{20, 21} Enrollment declines in WTCS were exclusively among non-Hispanic Whites, meaning that the proportion of minority students overall has increased slightly.²²

Table 6. Key Indicators of College Access and Success: Wisconsin, Minnesota, Illinois, and the Nation

	Wisconsin (Rank)	Minnesota (Rank)	Illinois (Rank)	Nation
On-time college-going rate for high school graduates	61.2% (28th)	68.4% (10th)	60.7% (30th)	62%
Percent of adults ages 18–24 enrolled in college	38.0% (16th)	38.4% (17th)	33.2% (6th)	34%
1st to 2nd year college persistence: 4-year colleges	77.7% (14th)	78.0% (18th)	71.1% (7th)	76%
1st to 2nd year college persistence: 2-year colleges	52.6% (23rd)	53.5% (20th)	49.6% (36th)	53%
Three-year graduation rate for associate degree students	33.5% (12th)	31.6% (16th)	24.8% (30th)	28%
Six-year graduation rate for bachelor’s degree students	58.2% (18th)	59.6% (14th)	58.7% (15th)	56%
Percent of adults ages 25–34 with an AA or higher	39.1% (23rd)	46.4% (4th)	42.7% (17th)	38%
Percent of adults 65 and older with an AA or higher	19.2% (37th)	23.4% (24th)	20.7% (32nd)	24%

Source: The National Center for Higher Education Management Systems <http://www.higheredinfo.org>.

INCREASING HIGHER EDUCATION SUCCESS RATES IS GOOD FOR THE ECONOMY

Like the rest of the nation, Wisconsin faces a significant challenge in translating college access into college success. Table 6 shows that within the state, 58 percent of first-time, full-time bachelor’s degree-seeking students completed that degree in six years. While slightly better than the national average (56%), this is an area to target for improvement in order to increase the number of educated people entering the workforce.

Two-year college students seeking associate degrees fair better in Wisconsin compared to elsewhere in the country. One-third of first-time, full-time associate degree-seeking students finish that degree within three years – 18 percent better than the national rate (28%). Wisconsin can capitalize on this strong graduation rate – and grow it – to fill the gap between middle-skill jobs and job seekers noted in the previous section.

Like the rest of the nation, Wisconsin faces a significant challenge in translating college access into college success.

Overall degree attainment in Wisconsin is just under 40 percent, ranking twenty-third in the nation in the percentage of adults ages 25–34 holding an associate degree or higher.²³

Wisconsin’s success for its “average” student conceals significant racial/ethnic disparities in college success. In fact, only white Wisconsin students outperform the national averages in six-year college completion – every other group lags behind. (See Table 4 in the Appendix.)

Similar to disparities in its high school graduation rates, the black/white gap in six-year college graduation rates in the state is 29 percentage points – 18 points larger than the national gap. Hispanic students in Wisconsin – one of the state’s fastest-growing groups – are 15 percentage points behind white students.²⁴

FINANCIAL PREPARATION: WISCONSIN STUDENTS’ ABILITY TO PAY

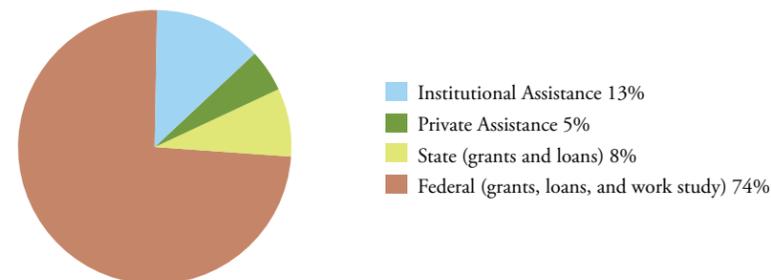
Even academically prepared students must be able to afford college if they are to attend. Evidence indicates that financial constraints are affecting Wisconsin families, compromising the enrollment of even the most talented students. For example, in the UW, low-income students with high test scores enroll at lower rates than high-income students with less impressive test scores. This disparity is a threat to Wisconsin’s economy, since research indicates that the individuals who are least likely to attend college accrue the greatest economic and social benefits from attending.²⁵



As of 2010, the average cost of attending a UW institution is more than \$16,500 and the average cost of attending a Wisconsin Technical College System (WTCS) college is more than \$13,000.²⁶ Tuition tends to increase annually in both systems. Annual increases have tended to grow larger over time. Since 2008, the average yearly tuition increase in UW was 5.2 percent (\$626) and the largest average increase was nine percent (over \$1,000). Costs have risen more slowly in WTCS, which even saw a tuition decrease in the last decade. Increases in WTCS have averaged 3.6 percent (\$349) since 2008.

Of course, many forms of federal and state financial aid are available to Wisconsin college students. These include grants that do not have to be repaid, loans which do have to be repaid, and work-study. Additionally, a number of efforts – by the state government, private foundations, and businesses – have been developed and deployed to address the issue of financing in recent years.

Figure 4. Total Financial Aid by Type, Wisconsin 2009-2010



Source: Higher Education Aids Board Report #11-22, Wisconsin State Student Financial Aid Data for 2009-2010.

The largest share of total aid (74%) is from federal loans, grants, and work-study (Figure 4). It is notable that despite different costs of attendance, students attending both UW and WTCS institutions finance their education in similar ways. In both sectors, the vast majority of students who don't qualify for grants finance their higher education through federal loans (96% for WTCS; 73% for UW). Even those students who do qualify for grants finance a significant portion of their higher education through federal loans (41% for WTCS; 48% for UW).²⁷



But there are several shortcomings of the current financial aid system. First, accessing most forms of aid usually requires that families complete the Free Application for Federal Student Aid (FAFSA). The form is long and complicated, often requiring more work than many tax forms.²⁸ There is new evidence that when students are given help on completing the FAFSA, they are more likely to receive aid and enroll in college.²⁹

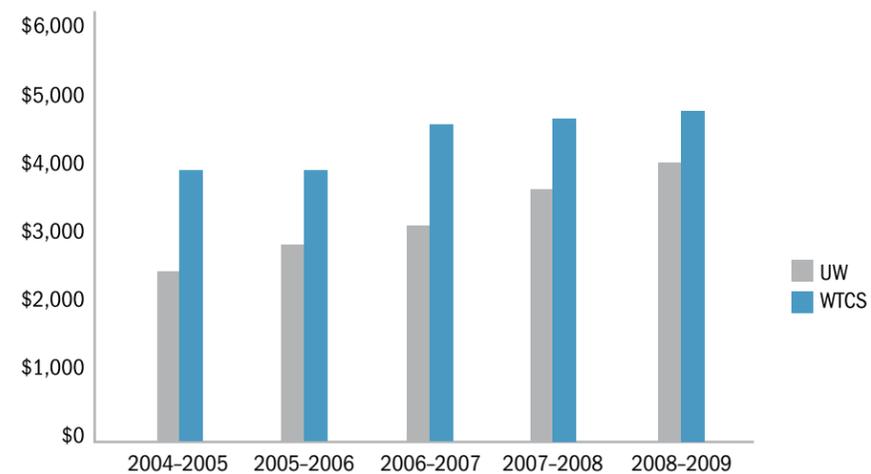
Just over half of all Wisconsin undergraduate students file the FAFSA and just over a third (26,012) of Wisconsin high school seniors complete the FAFSA.³⁰ While we do not know how many Wisconsin students would have been eligible to receive aid if they had completed the form, national estimates indicate that a substantial amount of existing resources are being left on the table.³¹ Across the United States, only 52 percent of all students at public colleges completed the FAFSA. Of the 48 percent of students who did not complete the FAFSA, 35 percent would have qualified for a Pell grant.³²

A second concern is that in order to qualify for federal loans, a student must be enrolled at least half-time in college. This is a barrier for working and parenting students, and others who face significant time constraints.^{33, 34}

Another concern is the declining purchasing power of the federal Pell grant – the primary source of federal grant aid. Originally intended to fully cover the costs of attendance for economically disadvantaged students, in 1975, the Pell grant met 84 percent of those costs. Today it covers just over one-third, on average.³⁵ In Wisconsin, the Pell grant buys even less, covering under one-third. As the value of the Pell grant declines, so does the prevalence of grant recipients at Wisconsin’s flagship university, UW-Madison.³⁶ Given the representation of economically disadvantaged students in the state, researchers estimate that approximately 15 percent of students on Madison’s campus should be Pell grant recipients. The number is actually only 12 percent – almost 750 fewer recipients than expected.³⁷

Taken together, these problems leave many Wisconsin college students with substantial amounts of unmet financial need.³⁸ Unmet need is growing, placing a larger burden on students. Primarily due to the smaller amount of available institutional aid, there is greater unmet need in WTCS (\$4,818 in 2008–2009) (see Figure 5) than in UW (\$4,162 in 2008–2009), not just in proportion, but in real dollars.³⁹ Additionally, the average debt for those graduating from four-year colleges in Wisconsin in 2009 totaled nearly \$23,000. More than 66 percent of the state’s 2009 graduates left with debt.⁴⁰

Figure 5. Average Unmet Need* Per Qualified Student: 2004–2009



Source: Wisconsin Legislative Fiscal Bureau, Informational Paper 37, January 2011.
*Calculated by subtracting average (family) contribution and average aid from average cost.



RECOGNIZING THE IMPERATIVE

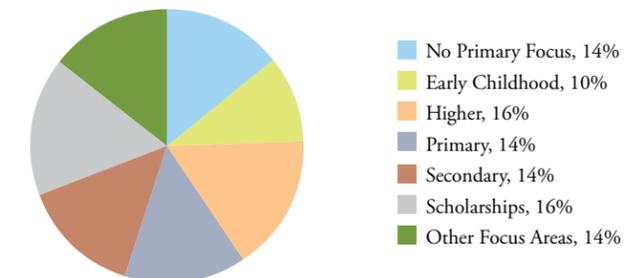
State government, institutions of higher education, foundations, and private industry clearly recognize the imperative: More of today’s students and workers will need to pursue postsecondary education for Wisconsin to build the workforce it needs to be competitive in the twenty-first century.

Several efforts are underway across the state to improve access to, and success in, postsecondary education. Significant funding is committed each year. Of the \$500 million in grants that Wisconsin foundations make each year, 35 percent of funding goes to education.⁴¹

While each grant focuses on improving aspects of educational achievement in Wisconsin, the specific areas of emphasis vary (see Figure 6). Some focus on counseling students, some work with community partners and businesses to provide mentoring opportunities, some work to enhance access to a college-bound curriculum, and some offer direct financial support to low-income students.

All efforts are important. But to meet the state’s imperative to increase the educational attainment of its workforce, our collective efforts will need to be bolstered by new investments and greater coordination between government, institutions of higher education, foundations, and private industry.

Figure 6. Primary Philanthropic Focus Areas within Education



Source: Donors Forum of Wisconsin. 2009 Wisconsin State of Philanthropy Report.

Appendix

Table 1. Changes in Wisconsin's Population Ages 5-24: 2006-2020

	Total	White	Hispanic	African-American	Asian	American Indian
Population 2006	1,521,386	83%	4%	9%	3%	1%
Projected Population 2020	1,466,482	78%	5%	11%	5%	1%
Projected Population Change 2006-2020	-3.6%	-6.0%	+25.0%	+22.2%	+66.7%	+0.0%

Source: The Education Trust http://www.edtrust.org/sites/edtrust.org/files/Wisconsin_0.pdf using U.S. Census Bureau projections of the population in 2020.

Table 2. On-Time High School Graduation Rates, Wisconsin, Minnesota, Illinois, and the Nation: 2006

	Wisconsin	Minnesota	Illinois	Nation
African-American	49%	NA	51%	59%
Asian	78%	73%	87%	79%
Hispanic	54%	37%	57%	55%
Native American	55%	54%	30%	50%
White	86%	84%	83%	76%
Overall	82%	79%	74%	69%

Source: Alliance for Excellent Education State Cards <http://www.all4ed.org/>.

Table 3. Projection of Percentage Changes in the Number of High School Graduates: 2005-2019

State	% Change	State	% Change
Nevada	59.1	Rhode Island	-21.0
Utah	53.0	North Dakota	-20.4
Georgia	41.3	District of Columbia	-19.4
Texas	40.0	Hawaii	-18.6
Idaho	33.6	Vermont	-15.9
North Carolina	33.2	Maine	-12.7
Arizona	32.5	New York	-11.5
Colorado	29.8	South Dakota	-11.2
Florida	22.7	Louisiana	-8.6
Tennessee	21.9	Montana	-8.6
Virginia	17.5	Michigan	-8.1
Delaware	17.1	New Hampshire	-8.1
Indiana	15.1	Maryland	-6.9
Oregon	15.0	Massachusetts	-6.2
Kentucky	13.2	Alaska	-5.5
Arkansas	11.0	Connecticut	-3.9
California	11.0	Wisconsin	-1.2
Alabama	10.8	New Jersey	-0.9
Pennsylvania	10.4		
Mississippi	7.6	# Rounds to zero.	
South Carolina	6.9		
Illinois	6.8		
Nebraska	6.2		
Oklahoma	6.2		
Washington	5.9		
New Mexico	4.6		
Missouri	4.6		
Wyoming	4.2		
Iowa	3.5		
West Virginia	2.6		
Kansas	0.9		
Ohio	0.3		
Minnesota	#		

Source: U.S. Department of Education, NCES, Common Core of Data surveys, and State Public High School Graduates Model, reference table 26.

Table 4. Six-Year Rates of BA Attainment in Wisconsin, Minnesota, Illinois, and the Nation: 2004, 2006*

	Wisconsin	Minnesota	Illinois	National
African-American	32%	38%	36%	41%
Asian	54%	52%	68%	66%
Hispanic	46%	50%	46%	48%
Native American	30%	32%	52%	39%
White	61%	60%	64%	59%
Overall	59%	57%	59%	57%

* Based on first-time, full-time freshmen, Fall 2000
Source: Alliance for Excellent Education State Cards <http://www.all4ed.org/>.

WKCE/WAA Combined, All Students in Combined Grades, by Economic Status (Tables 5–7)

Table 5. Reading

	Enrolled in Tested Grade(s)	No WSAS	Min Perf	Basic	Proficient	Advanced
Economically Disadvantaged	150,531	1%	11%	21%	43%	24%
Not Economically Disadvantaged	283,734	0%	3%	8%	36%	53%

Source: Wisconsin Department of Public Instruction.⁴²

22% more advantaged students scored proficient or advanced. Advantaged students achieved double the advanced scores.

Table 6. Math

	Enrolled in Tested Grade(s)	No WSAS	Min Perf	Basic	Proficient	Advanced
Economically Disadvantaged	150,531	1%	23%	16%	43%	18%
Not Economically Disadvantaged	283,734	0%	6%	8%	43%	42%

Source: Wisconsin Department of Public Instruction.⁴³

43% of both groups scored proficient on the math test. The advantaged group had more than double the number of advanced scores.

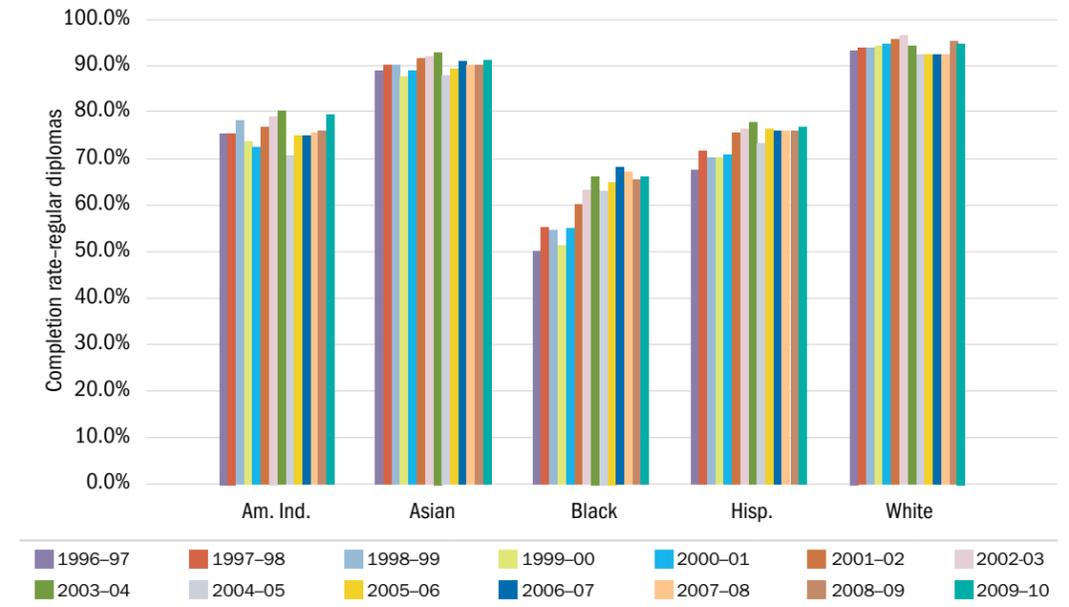
Table 7. Science

	Enrolled in Tested Grade(s)	No WSAS	Min Perf	Basic	Proficient	Advanced
Economically Disadvantaged	63,072	2%	19%	23%	42%	14%
Not Economically Disadvantaged	128,200	1%	6%	10%	46%	37%

Source: Wisconsin Department of Public Instruction.⁴⁴

83% of advantaged students were proficient or advanced compared to 56% of disadvantaged students. 23% more advantaged students scored advanced on the science test.

Figure 1. Wisconsin High School Graduation Rates by Race/Ethnicity: 1996–2009



Note: Total Expected to Complete High School is a count of students who were expected to complete high school in the year indicated, whether or not the students actually did. This total includes actual high school completers, cohort dropouts, and noncompleters who reached the maximum age associated with the constitutional right to a free public education.

Source: Wisconsin Department of Public Instruction Website <http://dpi.wi.gov/lbstat/data.html>

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- ² Center on Wisconsin Strategy. *Wisconsin's Forgotten Middle-Skill Jobs*. Available at <http://www.cows.org/pdf/rp-forgottenjobs.pdf>. (Madison, WI, 2009.)
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- ⁶ <ftp://ftp.bls.gov/pub/special.requests/lfaat7.txt>.
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- ¹⁰ Wisconsin Department of Public Instruction Press Release, More than 40 percent of students qualify for free or reduced-price meals, 3/10/2011.
- ¹¹ Dillon, S. (2009, July 15). Racial Gap in Testing Sees Shift by Region. *The New York Times*, p. A 10. Retrieved from: http://www.nytimes.com/2009/07/15/education/15educ.html?_r=1&scp=1&sq=wisconsin%20achievement%20gap&st=cse.
- ¹² It is the case that high school completion rates for both African-American and Hispanic public high school students in Wisconsin have been rising since 1996 (see Appendix Figure 1) but both continue to lag far behind rates of White and Asian students.
- ¹³ University of Wisconsin System Administration *Single-Year Headcount Reports – All Students*.
- ¹⁴ Wisconsin Technical College System Factbook. Retrieved from: <http://www.wtcsystem.edu/reports/data/factbook/index.htm>.
- ¹⁵ The National Center for Education Statistics. Retrieved from: <http://nces.ed.gov/ipeds/datacenter>.
- ¹⁶ University of Wisconsin System Administration *Single-Year Headcount Reports – All Students*. Retrieved from: http://www.uwsa.edu/opar/ssb/single_year_hc_all.htm.
- ¹⁷ The number of FTEs is calculated by taking the total number of credits taken by all students and dividing by 12 which results in the number of full-time students.
- ¹⁸ For each sector's headcount, see Wisconsin Technical College System at <http://www.wtcsystem.edu/reports/data/factbook/pdf/headcount.pdf> and http://www.wtcsystem.edu/legislative/state/pdf/enrollments_unemployment.pdf and The National Center for Education Statistics <http://nces.ed.gov/ipeds/datacenter>.
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³¹ American Council on Education (2006). *Missed Opportunities Revisited: New Information On Students Who Do Not Apply For Financial Aid*. Retrieved from: <http://www.acenet.edu/AM/Template.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=33967>.

³² Kantrowitz, Mark (2009). FAFSA Completion Rates by Level and Control of Institution. Retrieved from: <http://www.finaid.org/educators/20091014/fafsacompletion.pdf>.

³³ Goldrick-Rab, S., and Roksa, J., (2008). "A Federal Agenda for Promoting Student Success and Degree Completion." *Center for American Progress*: Washington, DC.

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³⁷ *Ibid*

³⁸ Unmet need is the result of a financial aid calculation determining the amount of money a student must put towards the total cost of attending college (including living costs) after a student's family resources and available financial aid funds (including grants, loans, and work-study funds) and the institution's cost of attendance are taken into account. Students can fund this unmet need through economizing, working, borrowing through credit cards or other alternative forms of credit, receiving additional funds from family, or some combination of the above.

³⁹ Higher Educational Aids Board, Board Report #09-19, Wisconsin State Student Financial Aid Data For 2007-08. Can be Accessed at <http://heab.state.wi.us/docs/board/0809/rep0919.pdf>.

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