

Stages to Enrollment at UW System by Family Income

This document provides data on application, admission, and enrollment rates among Wisconsin ACT test takers. It updates, with more detail, some of the information discussed in the OPAR bulletin, "Access to Higher Education by Income in Wisconsin." It is also a companion to the OPAR profile, "Enrollments by Family Income at UW System Institutions."

The accompanying tables examine Wisconsin ACT test takers at four stages on the path to enrollment in the UW System: initiating an application, completing an application, being admitted, and enrolling. The family income characteristics of test takers are presented in three ways. Section I shows the distribution of test takers by family income quintile within each stage to enrollment. (See the "% in Quintile" column.) In addition, the rates of transition from one enrollment stage to the next are shown. (See the "Rate (%)" column.) Section II illustrates the association between ACT score and family income. Section III shows the overall enrollment rate of test takers by family income quintile and ACT score range.

The population examined here is restricted to Wisconsin ACT test takers, since family income data are taken from the ACT examination. Test takers in each high school graduating class are matched with enrolled new freshmen in the following fall semester in the UW System. For example, test takers graduating from high school in 2000 are matched with fall semester enrollments of the 2000-01 academic year. As a result, the numbers and rates reported here differ slightly from numbers in publications discussing applications, admissions, and enrollments of all Wisconsin resident UW new freshmen. (See the Technical Notes for more information.)

Section I: Income Quintile Distributions and Rates of Transition for Stages to Enrollment

Almost two-thirds of Wisconsin ACT Takers applied to at least one UW System institution. Virtually all of those who applied completed their application, and approximately 95 percent of those applicants were admitted to at least one UW System institution. Of those admitted, over three-fourths elected to enroll as fall new freshmen.

Wisconsin Family Income Quintile = All Quintiles

Stage of Enrollment	1996			2000			2004		
	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)
Wisconsin ACT Test Takers	34,736	100.0		37,795	100.0		38,469	100.0	
Applied	21,881	100.0	63.0	23,868	100.0	63.2	24,983	100.0	64.9
Completed Application	21,513	100.0	98.3	23,408	100.0	98.1	24,346	100.0	97.5
Admitted	20,592	100.0	95.7	22,201	100.0	94.8	23,021	100.0	94.6
Enrolled	16,249	100.0	78.9	17,668	100.0	79.6	17,784	100.0	77.3

Sources: ACT, Inc., UW System, and US Census Bureau.

Students from the lowest family income quintile are under-represented among Wisconsin ACT test takers. If Wisconsin ACT test takers mirrored the income distribution of the Wisconsin population, 20 percent of test takers would be from the lowest income quintile. In 2004, only 15.5 percent of test takers were from the lowest quintile. The disparity increases at the application stage of the enrollment process. In 2004, only 13.1 percent of the test takers who applied to the UW System were in the lowest income quintile, and only 12.6 percent of those who completed an application were in the lowest quintile. Once lower income test takers have completed an application, however, they are admitted to and enroll in the UW System at rates comparable to other income groups.

Wisconsin Family Income Quintile = Lowest

Stage of Enrollment	1996			2000			2004		
	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)
Wisconsin ACT Test Takers	5,928	17.1		5,879	15.6		5,950	15.5	
Applied	3,060	14.0	51.6	3,148	13.2	53.5	3,261	13.1	54.8
Completed Application	2,954	13.7	96.5	3,028	12.9	96.2	3,079	12.6	94.4
Admitted	2,771	13.5	93.8	2,826	12.7	93.3	2,824	12.3	91.7
Enrolled	2,226	13.7	80.3	2,234	12.6	79.1	2,185	12.3	77.4

Sources: ACT, Inc., UW System, and US Census Bureau.

Wisconsin Family Income Quintile = Low-Medium

Stage of Enrollment	1996			2000			2004		
	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)
Wisconsin ACT Test Takers	8,330	24.0		8,498	22.5		8,177	21.3	
Applied	4,948	22.6	59.4	5,033	21.1	59.2	4,842	19.4	59.2
Completed Application	4,858	22.6	98.2	4,913	21.0	97.6	4,696	19.3	97.0
Admitted	4,648	22.6	95.7	4,666	21.0	95.0	4,413	19.2	94.0
Enrolled	3,711	22.8	79.8	3,796	21.5	81.4	3,482	19.6	78.9

Sources: ACT, Inc., UW System, and US Census Bureau.

Wisconsin Family Income Quintile = Medium

Stage of Enrollment	1996			2000			2004		
	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)
Wisconsin ACT Test Takers	7,934	22.8		9,061	24.0		8,882	23.1	
Applied	5,095	23.3	64.2	5,743	24.1	63.4	5,856	23.4	65.9
Completed Application	5,015	23.3	98.4	5,642	24.1	98.2	5,728	23.5	97.8
Admitted	4,826	23.4	96.2	5,386	24.3	95.5	5,473	23.8	95.5
Enrolled	3,879	23.9	80.4	4,405	24.9	81.8	4,350	24.5	79.5

Sources: ACT, Inc., UW System, and US Census Bureau.

Wisconsin Family Income Quintile = Medium-High

Stage of Enrollment	1996			2000			2004		
	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)
Wisconsin ACT Test Takers	6,420	18.5		7,908	20.9		8,444	22.0	
Applied	4,423	20.2	68.9	5,445	22.8	68.9	5,956	23.8	70.5
Completed Application	4,372	20.3	98.8	5,381	23.0	98.8	5,856	24.1	98.3
Admitted	4,206	20.4	96.2	5,131	23.1	95.4	5,584	24.3	95.4
Enrolled	3,303	20.3	78.5	4,117	23.3	80.2	4,361	24.5	78.1

Sources: ACT, Inc., UW System, and US Census Bureau.

Wisconsin Family Income Quintile = Highest

Stage of Enrollment	1996			2000			2004		
	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)	N	% in Quintile	Rate (%)
Wisconsin ACT Test Takers	6,123	17.6		6,448	17.1		7,014	18.2	
Applied	4,355	19.9	71.1	4,499	18.8	69.8	5,068	20.3	72.3
Completed Application	4,314	20.1	99.1	4,444	19.0	98.8	4,987	20.5	98.4
Admitted	4,141	20.1	96.0	4,192	18.9	94.3	4,728	20.5	94.8
Enrolled	3,131	19.3	75.6	3,116	17.6	74.3	3,406	19.2	72.0

Sources: ACT, Inc., UW System, and US Census Bureau.

Section II: ACT Score by Income Quintile

On average, Wisconsin high school students from families with lower incomes have lower scores on the ACT than students from higher income families. In 2004, almost half (49%) of test takers from the lowest quintile had ACT scores under 20, compared to only 17.5 percent of test takers in the highest quintile. Only 21.0 percent of test takers from the lowest quintile scored 24 or higher, while over half (51.6%) of test takers from the highest quintile scored in that range.

Wisconsin Family Income Quintile, 2004		Wisconsin ACT Test Takers				
		Under 20	20 to 23	24 to 27	28 to 36	All Scores
Lowest	N	2,915	1,784	934	318	5,950
	%	49.0%	30.0%	15.7%	5.3%	100.0%
Low-Medium	N	2,793	2,850	1,811	724	8,177
	%	34.2%	34.9%	22.1%	8.9%	100.0%
Medium	N	2,399	3,172	2,247	1,065	8,882
	%	27.0%	35.7%	25.3%	12.0%	100.0%
Medium-High	N	1,922	2,933	2,346	1,244	8,444
	%	22.8%	34.7%	27.8%	14.7%	100.0%
Highest	N	1,230	2,167	2,136	1,480	7,014
	%	17.5%	30.9%	30.5%	21.1%	100.0%
All Quintiles	N	11,259	12,906	9,474	4,830	38,469
	%	29.3%	33.5%	24.6%	12.6%	100.0%

Sources: ACT, Inc., and US Census Bureau.

Section III: Enrollment Rate of Wisconsin ACT Test Takers Within Income Quintile and ACT Score Range

Even among students with similar ACT scores, students from lower income families enroll in the UW System at lower rates than students from medium and medium-high income families. In 2004, the percentage of Wisconsin ACT test takers scoring 24 to 27 who enrolled as fall UW new freshmen was approximately 52 percent within the lowest two quintiles, versus 56.1 and 57.1 percent within the medium and medium-high quintiles, respectively. (As a point of reference, note the enrollment rate for all Wisconsin ACT test takers, 46.2 percent in 2004, is greater than that of all Wisconsin high school graduates, which was approximately 33 percent in 2004.)

Wisconsin Family Income Quintile, 1996	ACT Scores				
	Under 20	20 to 23	24 to 27	28 to 36	All Scores
Lowest	27.4%	44.2%	48.7%	42.0%	37.6%
Low-Medium	31.0%	51.0%	53.1%	45.9%	44.5%
Medium	34.5%	54.3%	58.2%	48.4%	48.9%
Medium-High	38.3%	57.8%	57.2%	48.3%	51.4%
Highest	40.3%	56.1%	55.1%	47.7%	51.1%
All Quintiles	33.0%	52.8%	55.0%	47.1%	46.8%

Sources: ACT, Inc., UW System, and US Census Bureau.

Wisconsin Family Income Quintile, 2000	ACT Scores				
	Under 20	20 to 23	24 to 27	28 to 36	All Scores
Lowest	29.9%	43.3%	45.4%	46.7%	38.0%
Low-Medium	32.5%	49.3%	51.5%	49.9%	44.7%
Medium	36.7%	52.7%	55.0%	50.3%	48.6%
Medium-High	40.2%	57.1%	56.5%	49.8%	52.1%
Highest	39.6%	53.6%	50.8%	44.0%	48.3%
All Quintiles	34.9%	51.6%	52.7%	48.0%	46.7%

Sources: ACT, Inc., UW System, and US Census Bureau.

Wisconsin Family Income Quintile, 2004	ACT Scores				
	Under 20	20 to 23	24 to 27	28 to 36	All Scores
Lowest	28.1%	41.6%	51.8%	43.4%	36.7%
Low-Medium	30.7%	46.2%	51.6%	51.7%	42.6%
Medium	34.8%	53.1%	56.1%	53.4%	49.0%
Medium-High	38.3%	55.7%	57.1%	52.2%	51.6%
Highest	38.6%	53.6%	52.0%	44.6%	48.6%
All Quintiles	33.1%	50.7%	54.1%	49.5%	46.2%

Sources: ACT, Inc., UW System, and US Census Bureau.

Technical Notes

The income distribution of UW students is estimated by comparing family income of Wisconsin ACT test takers with the income distribution of all Wisconsin families.

Income data for students is reported by high school students when they take the ACT. Approximately two-thirds of Wisconsin high school graduates have taken the ACT since 1990. Of these, over 85 percent reported their family income. ACT test takers who later reported family income for financial aid purposes in the UW System tended to understate their family income on the ACT. If this tendency is the case for all ACT test takers, then income quintile distributions may overstate the number of ACT test takers in the lower income quintiles.

Income quintiles and median incomes for Wisconsin families are estimated from income data reported by the US Census Bureau. Years between 1990 and 2000 are interpolated from data reported in the decennial censuses. Data after 2000 are from the American Community Survey.

Wisconsin Family Income Quintile	Quintile Lower Bound						
	1994	1996	1998	2000	2002	2003	2004
Low	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Low-Medium	\$23,000	\$25,000	\$27,000	\$29,000	\$28,000	\$28,000	\$29,000
Medium	\$36,000	\$39,000	\$43,000	\$45,000	\$45,000	\$46,000	\$47,000
Medium-High	\$49,000	\$54,000	\$58,000	\$62,000	\$62,000	\$64,000	\$66,000
High	\$69,000	\$75,000	\$82,000	\$87,000	\$88,000	\$90,000	\$92,000
Total Families	1,328,593	1,350,741	1,372,889	1,395,037	1,410,791	1,399,885	1,417,606
Median Family Income (Est.)	\$42,000	\$46,000	\$50,000	\$53,000	\$53,000	\$55,000	\$56,000

Note: Between 1990 and 2000, income quintiles, median income, and the number of families are interpolated from family income distributions in 1990 and 2000, adjusted for inflation.

Source: US Census Bureau.

Wisconsin ACT test takers in a given high school graduating class are matched with enrolled new freshmen in the following fall semester in the UW System. For example, test takers graduating high school in 2000 are matched with fall semester enrollments of the 2000-01 academic year.

Wisconsin ACT test takers make up about 87 percent of resident UW new freshmen enrollments. The remaining 13 percent are new freshmen who did not immediately enroll after high school, who were not required to submit an ACT score with their application, who graduated from a non-Wisconsin high school, or who otherwise could not be matched with Wisconsin ACT test takers in the corresponding high school graduating class. Because Wisconsin ACT test takers do not comprise all resident new freshmen, numbers and proportions reported for this population may differ from those of all resident UW new freshmen.

For More Information

The following publications on this topic are on the OPAR web site, <http://www.uwsa.edu/opar> :

- "Enrollments by Family Income at UW System Institutions," OPAR Profile, November 2005.
- "Access to Higher Education by Income in Wisconsin," OPAR Bulletin, revised November 2004.
- "Access to the UW System: Service Rates by Family Income," OPAR Occasional Research Brief, June 2001.

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