

# APPRENTICESHIP COMPLETION

Employment and Earnings Data  
for 2019-20 Apprentices





Promoting awareness of apprenticeship, and expanding access to it, are priorities for all program partners.



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# HIGHLIGHTS

## 2019-20 APPRENTICESHIP COMPLETION

Registered Apprenticeship combines structured, on-the-job training with classroom instruction. Apprentices learn the theory and practice of a highly skilled occupation in one to six years and are paid for their time on the job and in the classroom.

Wisconsin's technical colleges work closely with the Wisconsin Department of Workforce Development (DWD)-Bureau of Apprenticeship Standards (BAS) to meet employer needs in the area of apprenticeship, providing the classroom instruction for apprenticeship programs in industrial, construction and all other sectors.

This report is based on a recent survey of 1,220 individuals who received an apprenticeship completion certificate in 2019-20, and who received their apprentice-related instruction at a Wisconsin technical college, with 343 (28%) responding.

With an overall median annual earnings of \$80,000 for individuals who completed an apprenticeship in 2019-20 and responded to the survey, it's easy to see why apprenticeship participation has increased about 29% over the past five years. Given Wisconsin's workforce challenges, it is also clear why it is increasingly important to promote interest in apprenticeship and assure access for historically underrepresented populations, including women and people of color.

This is a priority at the federal level and for all Wisconsin program partners.



Photo courtesy of WI Dept. of Workforce Development-Bureau of Apprenticeship Standards



## TRAINING SATISFACTION



## CONTINUING EDUCATION



## MEDIAN ANNUAL EARNINGS FOR ALL APPRENTICES



## MEDIAN ANNUAL EARNINGS BY INDUSTRY SECTOR

**\$89,100**

MEDIAN ANNUAL EARNINGS FOR ALL OTHER SECTORS

**\$81,114**

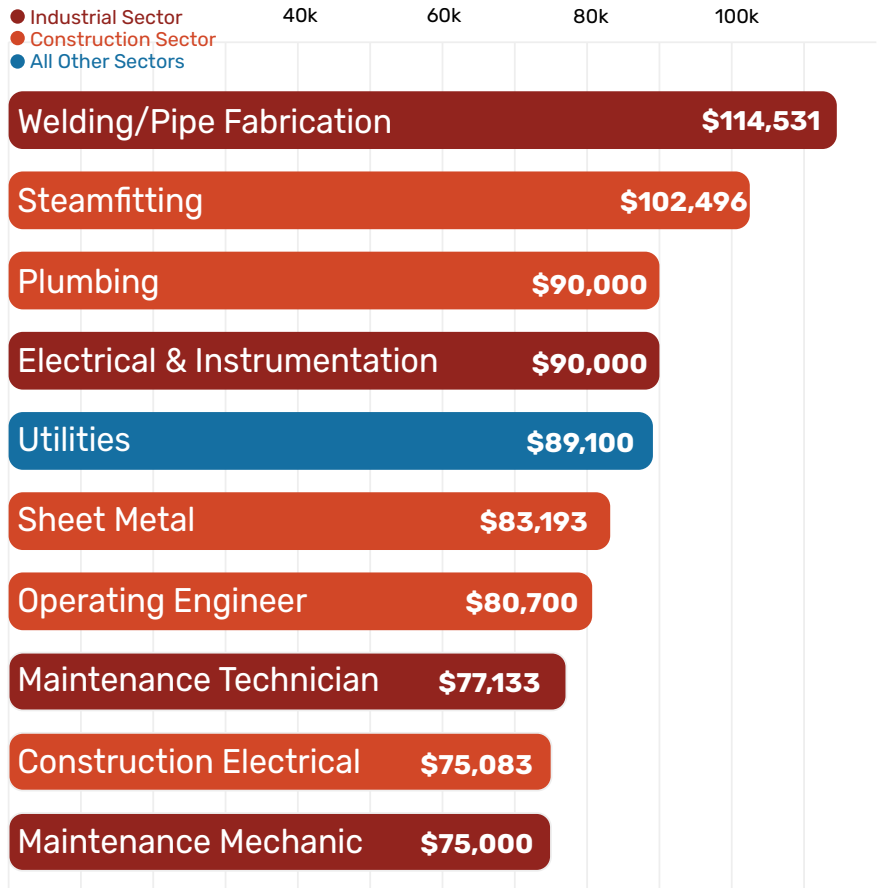
MEDIAN ANNUAL EARNINGS FOR CONSTRUCTION SECTOR

**\$74,633**

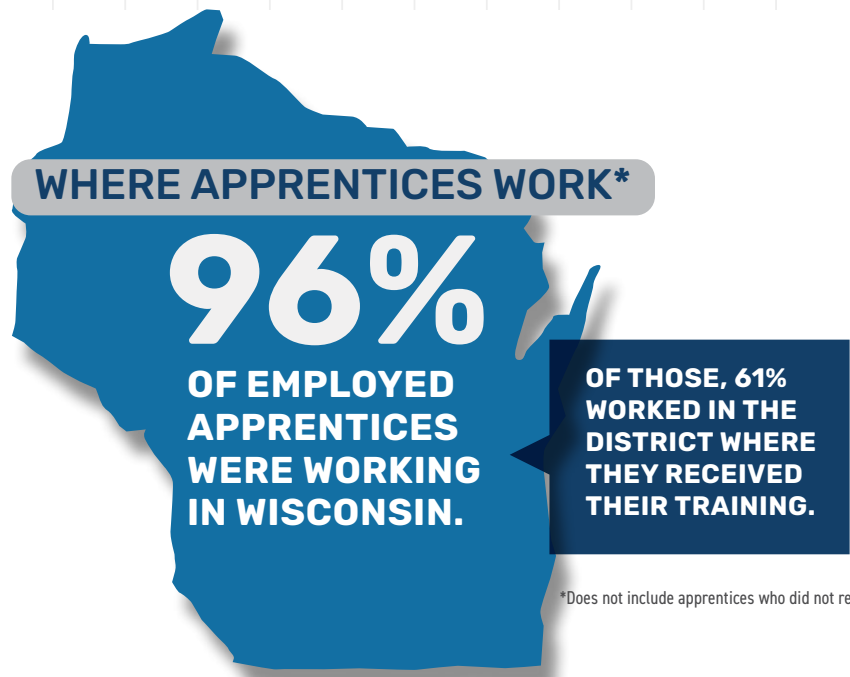
MEDIAN ANNUAL EARNINGS FOR INDUSTRIAL SECTOR

In this report, for the first time, apprentices were asked to self-report both annual earnings and hourly wage data to assure comparison of like data. For some sectors, this resulted in notable changes in median annual earnings. Median earnings listed are for 2019-20. Apprentices who were employed in a job related to the training they received.

## MEDIAN ANNUAL SELF-REPORTED EARNINGS BY HIGHEST EARNING OCCUPATIONS



## WHERE APPRENTICES WORK\*



\*Does not include apprentices who did not report location.

Wisconsin's technical colleges recognize successful completion of many apprenticeships as 39 credits towards the 60-credit Technical Studies – Journey Worker Associate Degree

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# SECTOR-SPECIFIC APPRENTICESHIPS

Apprenticeships typically have been grouped in categories established by the Wisconsin Department of Workforce Development: Construction, Industrial and Service sectors. For 2019-20 data, to better incorporate new and emerging apprenticeship programs, the Service sector has been replaced by All Other Sectors, which includes Agriculture, Biotechnology, Finance, Healthcare, Information Technology, Service, Transportation and Utilities apprenticeship programs.

In the tables that follow, an asterisk indicates fewer than 5 reported completers or fewer than 3 completers reported wage information for a particular "Program." Within each sector, "Program" may include multiple apprenticeships with like curriculum for the apprentice-related instruction provided by Wisconsin's technical colleges. To provide additional detail, those "programs" are further broken out by individual apprenticeships in the final table: Apprenticeships, by WTCS Program Number.

## CONSTRUCTION

Program Title	Program	Number of Completers	Responses	In Labor Force	Employed		In Trade		Seeking Employment	Median Earnings		Average Hours/Week
					Total	%	Total	%		Hourly Base Wage	Annual Earnings	
MASONRY	50-408-0	8	0	*	*	*	*	*	*	*	*	*
CARPENTRY	50-410-0	75	9	9	9	100%	9	100%	0	\$30.00	\$67,854.78	43
CONSTRUCTION ELECTRICAL	50-413-0	197	57	56	55	98%	55	100%	1	\$37.09	\$75,082.70	42
GLAZING	50-417-0	8	1	1	1	100%	1	100%	0	*	*	*
PAINTING AND DECORATING	50-424-0	15	1	1	1	100%	1	100%	0	*	*	*
PLUMBING	50-427-0	90	30	30	30	100%	30	100%	0	\$42.50	\$90,000.00	43
SHEET METAL	50-432-0	82	11	11	11	100%	11	100%	0	\$40.00	\$83,193.60	40
SPRINKLER FITTER	50-434-1	*	*	*	*	*	*	*	*	*	*	*
STEAMFITTING	50-435-0	97	25	24	24	100%	24	100%	0	\$48.84	\$102,496.00	42
IRONWORKING	50-437-1	13	2	2	2	100%	2	100%	0	*	*	40
ROOFING	50-446-0	*	*	*	*	*	*	*	*	*	*	*
OPERATING ENGINEER	50-447-0	162	70	70	70	100%	70	100%	0	\$41.00	\$80,700.00	53
TELE/DATA	50-451-0	13	5	5	5	100%	5	100%	0	\$29.00	\$60,315.40	40
<b>Construction Trade Group Total</b>		<b>764</b>	<b>211</b>	<b>209</b>	<b>208</b>	<b>99%</b>	<b>208</b>	<b>100%</b>	<b>1</b>	<b>\$40.00</b>	<b>\$81,113.80</b>	<b>42</b>

## INDUSTRIAL

Program Title	Program	Number of Completers	Responses	In Labor Force	Employed		In Trade		Seeking Employment	Median Earnings		Average Hours/Week
					Total	%	Total	%		Hourly Base Wage	Annual Earnings	
INDUSTRIAL ELECTRICIAN	50-413-1	66	16	16	16	100%	16	100%	0	\$31.80	\$74,000.00	47
ELECTRICAL & INSTRUMENTATION	50-414-2	29	3	3	3	100%	3	100%	0	\$34.18	\$90,000.00	42
INSTRUMENTATION	50-605-1	*	*	*	*	*	*	*	*	*	*	*
MAINTENANCE TECHNICIAN	50-464-1	21	6	6	6	100%	6	100%	0	\$33.12	\$77,132.95	42
MACHINIST	50-420-0	66	14	14	14	100%	14	100%	0	\$28.50	\$64,230.40	43
MAINTENANCE MECHANIC	50-423-0	128	51	51	51	100%	49	96%	0	\$32.24	\$75,000.00	45
TOOL & DIE	50-439-0	53	15	15	15	100%	13	86%	0	\$26.83	\$62,077.84	43
WELDING/PIPE FABRICATION	50-442-0	42	10	10	9	90%	9	100%	1	\$42.00	\$114,531.00	42
METAL FABRICATION	50-457-0	*	*	*	*	*	*	*	*	*	*	*
<b>Industrial Trade Group Total</b>		<b>410</b>	<b>115</b>	<b>115</b>	<b>114</b>	<b>99%</b>	<b>110</b>	<b>96%</b>	<b>1</b>	<b>\$32.09</b>	<b>\$74,632.95</b>	<b>43</b>



# ALL OTHER SECTORS

Program Title	Program	Number of Completers	Responses	In Labor Force	Employed		In Trade		Seeking Employment	Median Earnings		Average Hours/Week
					Total	%	Total	%		Hourly Base Wage	Annual Earnings	
ARBORIST	50-001-1	*	*	*	*	*	*	*	*	*	*	*
IT - SERVICE DESK TECHNICIAN	50-154-1	*	*	*	*	*	*	*	*	*	*	*
UTILITIES	50-468-0	34	15	15	15	100%	14	93%	0	\$40.75	\$89,100.35	40
COSMETOLOGY	50-502-1	9	1	1	1	100%	1	100%	0	*	*	*
<b>Other Trade Group Total</b>		<b>47</b>	<b>17</b>	<b>17</b>	<b>17</b>	<b>100%</b>	<b>16</b>	<b>94%</b>	<b>0</b>	<b>\$40.75</b>	<b>\$89,100.35</b>	<b>40</b>

## TOTAL

Program Title	Program	Number of Completers	Responses	In Labor Force	Employed		In Trade		Seeking Employment	Median Earnings		Average Hours/Week
					Total	%	Total	%		Hourly Base Wage	Annual Earnings	
TOTAL ALL PROGRAMS		1,221	343	341	339	99%	334	98%	2	\$37.18	\$80,000.00	42

## APPRENTICESHIPS, BY WTCS PROGRAM NUMBER

Program Title	Program Group	Programs within group (program number)
MACHINIST	50-420-0	INJECTION MOLD SET-UP (PLASTIC) (50-420-1), MACHINIST (50-420-2), MACHINE REPAIR (50-420-6), INDUSTRIAL MANUFACTURING TECHNICIAN (50-420-9)
MAINTENANCE MECHANIC	50-423-0	MAINTENANCE MECHANIC/MILLWRIGHT (50-423-1), MILLWRIGHT-PIPEFITTER (50-423-3)
TOOL & DIE	50-439-0	TOOL & DIE (50-439-3), TOOL & DIE TECHNOLOGIES (50-439-4)
WELDING/PIPE FABRICATION	50-442-0	PIPEFITTING (50-435-1), WELDING (50-442-1), PIPE FABRICATOR (50-422-2)
METAL FABRICATION	50-457-0	METAL FABRICATOR (50-457-1), METAL FABRICATION (50-457-2)
UTILITIES	50-468-0	ELECTRIC LINE (50-413-6), METERING TECHNICIAN (50-413-7), SUBSTATION ELECTRICAL (50-468-1)

# DEMOGRAPHIC COMPOSITION OF WTCS APPRENTICES

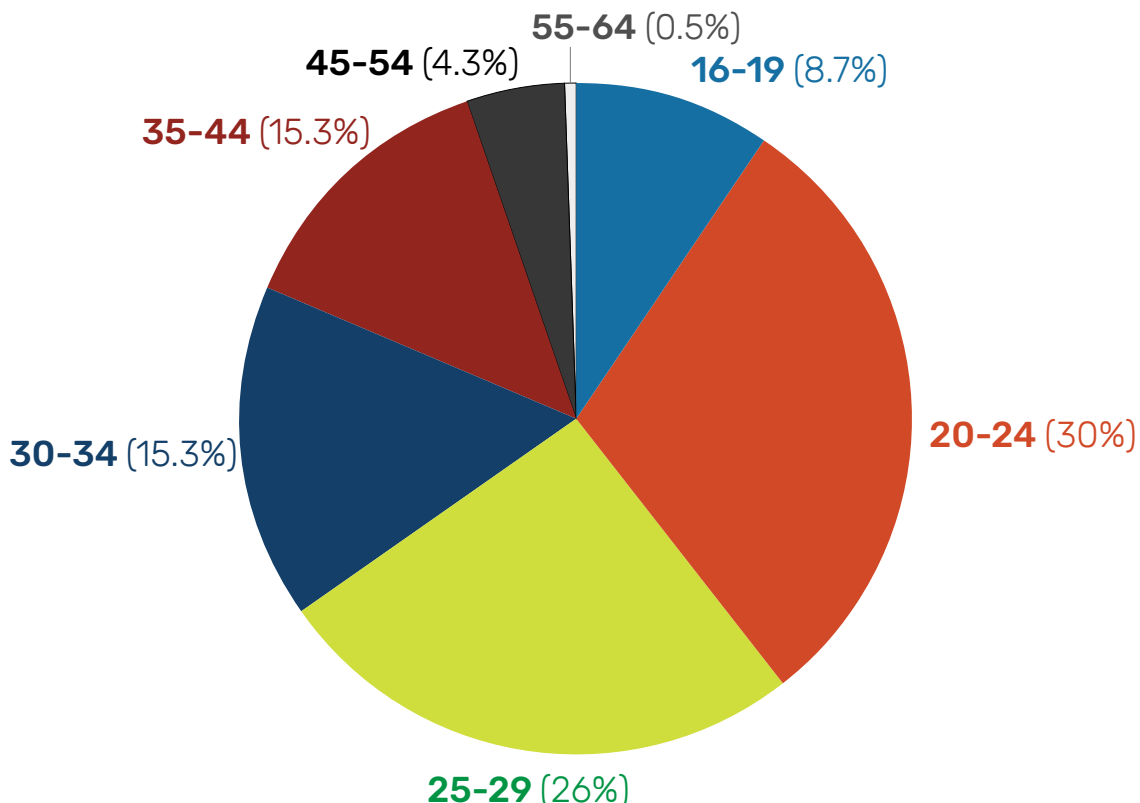
To ensure equitable access to valuable and expanding apprenticeship opportunities, the federal Department of Labor and Wisconsin Department of Workforce Development recently revised federal and state Equal Employment Opportunity guidance. This included improved tools to deepen community engagement with historically underrepresented populations, including women and people of color. This engagement is a priority for all Wisconsin apprenticeship partners, including DWD, WTCS, Wisconsin's technical colleges and employers.

While these efforts are increasingly reflected in DWD apprenticeship participation statistics, they are not yet fully reflected in the following demographic information, which is limited to individuals who completed an apprenticeship in 2019-20, and who received related instruction from a Wisconsin technical college.

Trade Group	Males	Females	N/R	Total	Hispanic	AmericanIndian/ AlaskanNative	Asian	Black	White	Pacific Islander	Multi-ethnic	N/R
CONSTRUCTION	742	15	7	764	11	*	*	*	511	0	5	226
INDUSTRIAL	396	10	*	409	5	*	*	5	338	*	*	53
OTHER	37	10	0	47	*	*	*	*	37	0	0	5
<b>Totals</b>	<b>1,175</b>	<b>35</b>	<b>10</b>	<b>1,220</b>	<b>17</b>	<b>7</b>	<b>8</b>	<b>10</b>	<b>886</b>	<b>*</b>	<b>7</b>	<b>284</b>
<b>Percentages</b>	<b>96.31</b>	<b>2.87</b>	<b>0.82</b>	<b>100.00</b>	<b>1.39</b>	<b>0.57</b>	<b>0.66</b>	<b>0.82</b>	<b>72.62</b>	<b>*</b>	<b>0.57</b>	<b>23.28</b>

**Note:** N/R means Not Reported; \*indicates less than 5 were reported; total is unduplicated for apprentices completing more than one apprenticeship program; and percentages are rounded to the nearest tenth.

## APPRENTICES BY AGE



Percentages are rounded to the nearest tenth



# APPENDIX A: METHODOLOGY & DEFINITIONS

## BACKGROUND

Wisconsin's 16 technical colleges conduct an annual survey to assess outcomes for those receiving an apprenticeship completion certificate from the Wisconsin Department of Workforce Development-Bureau of Apprenticeship Standards (DWD-BAS) and received related instruction at a Wisconsin technical college.

The primary objective is to analyze employment and earnings data in a format similar to the annual Wisconsin Technical College System (WTCS) Graduate Outcomes report. Survey questions also gauge satisfaction with the on-the-job training and related classroom instruction provided by the technical colleges.

## METHODOLOGY

Between August and November 2021, each Wisconsin technical college surveyed apprentices who earned an apprenticeship completion certificate from DWD-BAS in 2019-20, and who attended that college for their related classroom instruction. Appendix B is a copy of the survey instrument.

1,220 individuals received an apprenticeship completion certificate in 2019-20, with 343 (28%) responding. Each Wisconsin technical college submitted its survey responses to WTCS for compilation of this System-wide report. To capture earnings data, 2019-20 apprentices were asked to provide both a base hourly wage and yearly earnings if available. Prior surveys asked for one wage value and then converted this value based on weekly hours reported. These data improvements may complicate efforts to make direct comparisons to previous reports.

## DEFINITIONS

"Labor force" includes all employed and unemployed respondents except individuals who were unemployed and not seeking employment.

A person was considered employed if they worked for pay or profit at the time of the survey. Individuals may be employed full-time or part-time. Part-time is defined as those working less than 35 hours per week.

Individuals not working for pay or profit at the time of the survey were considered unemployed. An unemployed individual was considered to be seeking employment if they were actively looking for work.

Employed respondents who indicated they were employed in the trade for which they received training are counted in the "In Trade" category. As a result, this category is a subset of the employed category.

Yearly earnings data are reported for respondents who indicated they were employed full-time in the trade. Median annual earnings is not an average – it is the mid-point of all reported earnings, with half of reported earnings below and half above.

In an attempt to assure confidentiality, there must be a minimum of three apprenticeship completers employed in a trade who reported salaries in order to publish median annual earnings for any given program. There must be a minimum of five reported completers to show the number of completers in that program/area. (Please note: not all respondents included earnings in their survey response).

# APPENDIX B: SURVEY INSTRUMENT

## APPRENTICESHIP COMPLETER SURVEY

Please check one answer.

1. How satisfied are you with the paid-related instruction received at our school?

- Very Satisfied
- Satisfied
- Unsatisfied
- Very Unsatisfied

2. How satisfied are you with the apprentice training you received on the job?

- Very Satisfied
- Satisfied
- Unsatisfied
- Very Unsatisfied

3. Which **one** of the below best describes you?

- **I am employed** in my trade
- **I am employed** in a position outside of my trade
- **I am not employed** but am looking for a job.
- **I am not employed** and not looking for a job.

NOTE: If you are currently employed, please continue with Question 4. If not employed, please stop here.

4. Are you considering continuing your formal education? Technical Studies Journey Worker (AAS, associate degree, bachelors degree)

- Yes
- No

5. Please list the following job information:

*Job Title* \_\_\_\_\_

*Name of Employer* \_\_\_\_\_

\_\_\_\_\_  
*Street Address*

\_\_\_\_\_  
*City, State & Zip Code*

Name of immediate supervisor:  
\_\_\_\_\_

6. What is your present wage? If available, please provide both.

Hourly base wage: \$ \_\_\_\_\_

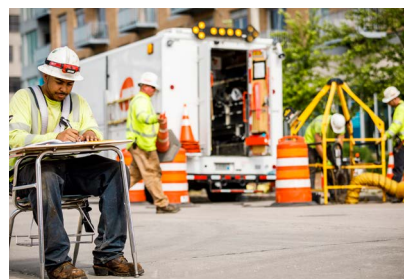
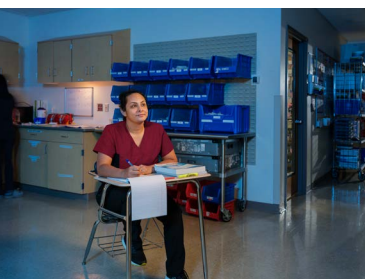
Yearly earnings: \$ \_\_\_\_\_

7. How many hours do you work during an average work week?

\_\_\_\_\_ hours per week

## Emerging new apprentice occupations, not yet reflected in the WTCS Apprenticeship Completion Report:

- Biotechnology Lab Support Assistant Apprentice
- Broadband Service Technician Apprentice
- Cook-Chef Apprentice
- Culinary Apprenticeship
- Cybersecurity Analyst
- Dairy Grazier Apprenticeship
- Data Analyst Apprentice
- Early Childhood Educator Apprentice
- Facility Maintenance Technician
- Financial Services Professional Apprentice
- Industrial Metrology Technician
- IT - Software Developer Apprentice
- Medical Assistant Apprentice
- Organic Vegetable Farm Manager Apprenticeship
- Pharmacy Technician
- Roadway Maintenance Technician



***TO LEARN MORE ABOUT  
APPRENTICESHIP, VISIT:***

[dwd.wisconsin.gov/apprenticeship/](http://dwd.wisconsin.gov/apprenticeship/)

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