

# Key Middle-Skill Opportunities in Wisconsin

Developed by the Center on Wisconsin Strategy for RISE

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This list was compiled from Wisconsin Department of Workforce Development data screened for jobs that have a minimum of 50 projected openings per year (2006-2016), an entry hourly wage of at least \$10, and do not typically require a 4-year college degree or experience in a related occupation (excluding almost all supervisory and managerial positions).

## SUMMARY

Industry	# Occupations	Est. Annual Openings
Construction & Utilities	18	3,370
Manufacturing	29	3,770
Health Care	18	4,770
Clerical/Sales	25	6,840
Logistics	9	2,960
Other	7	1,050
<b>Total</b>	<b>106</b>	<b>22,760</b>

## DETAIL

SOC Code	Occupational Title	Avg Annual Openings <sup>1</sup>	Typical Education and Training Path <sup>2</sup>	Average Annual Salary <sup>3</sup>	Entry Level Wage <sup>4</sup>	Exper. Hourly Wage <sup>5</sup>
<b>Construction and Utilities</b>						
47-2031	Carpenters	700	Long-term on-the-job training, apprenticeship	\$38,760	\$12.54	\$21.68
47-2111	Electricians	490	Long-term on-the-job training, apprenticeship	\$47,831	\$16.36	\$26.31
47-2152	Plumbers, Pipefitters, and Steamfitters	340	Long-term on-the-job training, apprenticeship	\$54,268	\$17.86	\$30.21
47-2061	Construction Laborers	250	Moderate-term on-the-job training	\$35,212	\$11.22	\$19.78
47-2073	Operating Engineers and Other Construction Equipment Operators	240	Moderate-term on-the-job training	\$45,693	\$15.68	\$25.11
47-2141	Painters, Construction and Maintenance	200	Moderate-term on-the-job training	\$35,263	\$10.34	\$20.26
47-2051	Cement Masons and Concrete Finishers	170	Moderate-term on-the-job training	\$38,223	\$12.27	\$21.43
51-7011	Cabinetmakers and Bench Carpenters	170	Long-term on-the-job training	\$29,636	\$10.16	\$16.29
49-9021	Heating, Air Conditioning, and Refrigeration Mechanics and Installers	150	Long-term on-the-job training, apprenticeship	\$42,513	\$13.26	\$24.03
47-2181	Roofers	100	Moderate-term on-the-job training	\$34,666	\$11.61	\$19.20
49-9051	Electrical Power-Line Installers and Repairers	100	Long-term on-the-job training, apprenticeship	\$53,554	\$18.61	\$29.32
47-2021	Brickmasons and Blockmasons	90	Long-term on-the-job training, apprenticeship	\$49,779	\$17.61	\$27.09
49-9052	Telecommunications Line Installers and Repairers	70	Long-term on-the-job training, apprenticeship	\$40,453	\$13.46	\$22.44
17-3023	Electrical and Electronic Engineering Technicians	70	Associate degree	\$44,784	\$15.88	\$24.36
17-3011	Architectural and Civil Drafters	60	Postsecondary vocational training	\$41,868	\$14.93	\$22.73
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	60	Postsecondary vocational training	\$47,304	\$17.28	\$25.47
49-2094	Electrical and Electronics Repairers, Commercial and Industrial Equipment	60	Postsecondary vocational training	\$44,910	\$15.64	\$24.57
17-3026	Industrial Engineering Technicians	50	Associate degree	\$41,915	\$15.53	\$22.46

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<b>Manufacturing</b>						
51-4121	Welders, Cutters, Solderers, and Brazers	360	Postsecondary vocational training	\$33,933	\$12.56	\$18.19
51-4041	Machinists	300	Postsecondary vocational training, apprenticeship	\$36,697	\$12.81	\$20.06
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	270	Moderate-term on-the-job training	\$29,377	\$10.20	\$16.08
49-9041	Industrial Machinery Mechanics	250	Postsecondary vocational training, apprenticeship	\$43,525	\$15.40	\$23.69
51-5023	Printing Machine Operators	250	Moderate-term on-the-job training	\$34,716	\$10.88	\$19.59
49-9042	Maintenance and Repair Workers, General	240	Postsecondary vocational training, apprenticeship	\$35,045	\$11.62	\$19.46
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	220	Moderate-term on-the-job training	\$29,078	\$10.19	\$15.87
51-9196	Paper Goods Machine Setters, Operators, and Tenders	210	Moderate-term on-the-job training	\$35,139	\$11.66	\$19.51
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	170	Moderate-term on-the-job training	\$34,962	\$12.20	\$19.11
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	170	Postsecondary vocational training	\$34,923	\$12.34	\$19.02
47-2211	Sheet Metal Workers	130	Long-term on-the-job training, apprenticeship	\$47,481	\$14.53	\$26.98
17-3013	Mechanical Drafters	110	Postsecondary vocational training	\$43,636	\$14.88	\$24.03
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	100	Moderate-term on-the-job training	\$31,133	\$10.95	\$16.98
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	90	Moderate-term on-the-job training	\$32,517	\$11.28	\$17.81
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	90	Postsecondary vocational training	\$32,165	\$11.10	\$17.65
51-2041	Structural Metal Fabricators and Fitters	70	Moderate-term on-the-job training	\$34,196	\$13.33	\$17.99
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	70	Moderate-term on-the-job training	\$29,482	\$10.10	\$16.21
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	70	Moderate-term on-the-job training	\$33,307	\$11.41	\$18.31
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	70	Postsecondary vocational training	\$42,471	\$15.69	\$22.78
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	60	Moderate-term on-the-job training	\$32,592	\$11.63	\$17.69
51-4111	Tool and Die Makers	60	Postsecondary vocational training, apprenticeship	\$45,844	\$17.05	\$24.54
47-2221	Structural Iron and Steel Workers	60	Long-term on-the-job training, apprenticeship	\$46,272	\$14.70	\$26.02
19-4031	Chemical Technicians	50	Associate degree	\$38,445	\$12.61	\$21.42
51-4022	Forging Machine Setters, Operators, and Tenders, Metal and Plastic	50	Moderate-term on-the-job training	\$32,069	\$11.27	\$17.49
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	50	Moderate-term on-the-job training	\$33,666	\$11.33	\$18.61
49-9099	Installation, Maintenance, and Repair Workers, All Other	50	Moderate-term on-the-job training	\$36,325	\$10.81	\$20.79
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	50	Moderate-term on-the-job training	\$30,080	\$10.36	\$16.51
51-2031	Engine and Other Machine Assemblers	50	Short-term on-the-job training	\$37,655	\$12.40	\$20.96
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	50	Moderate-term on-the-job training	\$31,639	\$11.25	\$17.19
<b>Health Care (+)</b>						
29-1111	Registered Nurses	2,180	Associate or Bachelor's degree <sup>(6)</sup>	\$57,376	\$22.15	\$30.30
29-2061	Licensed Practical and Licensed Vocational Nurses	430	Postsecondary vocational training	\$37,618	\$15.20	\$19.53
31-9092	Medical Assistants	350	Moderate-term on-the-job training	\$27,632	\$10.88	\$14.49
31-9091	Dental Assistants	250	Moderate-term on-the-job training	\$29,454	\$11.24	\$15.62
29-2021	Dental Hygienists	210	Associate degree	\$55,069	\$22.77	\$28.33

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29-2071	Medical Records and Health Information Technicians	180	Associate degree	\$30,629	\$10.25	\$16.96
43-6013	Medical Secretaries	170	Postsecondary vocational training	\$28,180	\$10.30	\$15.17
29-2034	Radiologic Technologists and Technicians	150	Associate degree	\$48,371	\$18.43	\$25.67
29-2055	Surgical Technologists	140	Postsecondary vocational training	\$41,203	\$15.89	\$21.77
31-9094	Medical Transcriptionists	130	Postsecondary vocational training	\$30,772	\$12.19	\$16.10
29-2056	Veterinary Technologists and Technicians	90	Associate degree	\$28,104	\$10.11	\$15.21
19-4099	Life, Physical, and Social Science Technicians, All Other	90	Associate degree	\$36,842	\$13.69	\$19.72
29-1126	Respiratory Therapists	80	Associate degree	\$48,842	\$19.39	\$25.53
51-9081	Dental Laboratory Technicians	70	Long-term on-the-job training	\$36,639	\$11.27	\$20.79
29-2099	Health Technologists and Technicians, All Other	70	Postsecondary vocational training	\$38,520	\$13.22	\$21.17
29-2012	Medical and Clinical Laboratory Technicians	60	Associate degree	\$36,496	\$13.64	\$19.50
31-2021	Physical Therapist Assistants	60	Associate degree	\$38,206	\$14.25	\$20.43
31-2022	Physical Therapist Aides	60	Short-term on-the-job training	\$24,614	\$10.25	\$12.63
<b>Clerical/Sales</b>						
43-4051	Customer Service Representatives	2,100	Moderate-term on-the-job training	\$31,243	\$10.53	\$17.27
43-3031	Bookkeeping, Accounting, and Auditing Clerks	1,200	Moderate-term on-the-job training	\$29,988	\$10.17	\$16.54
43-6014	Secretaries, Except Legal, Medical, and Executive	720	Postsecondary vocational training	\$28,122	\$10.22	\$15.17
15-1041	Computer Support Specialists	360	Associate degree	\$40,400	\$13.88	\$22.20
21-1093	Social and Human Service Assistants	300	Moderate-term on-the-job training	\$29,355	\$10.06	\$16.14
43-5061	Production, Planning, and Expediting Clerks	250	Moderate-term on-the-job training	\$40,119	\$13.89	\$21.99
43-3011	Bill and Account Collectors	220	Short-term on-the-job training	\$29,219	\$10.80	\$15.67
43-4151	Order Clerks	210	Short-term on-the-job training	\$27,788	\$10.06	\$15.01
13-1031	Claims Adjusters, Examiners, and Investigators	200	Long-term on-the-job training	\$50,661	\$16.87	\$28.10
43-3021	Billing and Posting Clerks and Machine Operators	160	Moderate-term on-the-job training	\$29,246	\$11.08	\$15.55
41-3011	Advertising Sales Agents	120	Moderate-term on-the-job training	\$45,055	\$11.06	\$26.96
43-3051	Payroll and Timekeeping Clerks	110	Moderate-term on-the-job training	\$32,538	\$11.50	\$17.71
23-2011	Paralegals and Legal Assistants	110	Associate degree	\$44,004	\$14.84	\$24.31
43-9041	Insurance Claims and Policy Processing Clerks	100	Moderate-term on-the-job training	\$30,056	\$11.25	\$16.05
43-6012	Legal Secretaries	90	Postsecondary vocational training	\$33,650	\$11.75	\$18.39
43-4131	Loan Interviewers and Clerks	80	Short-term on-the-job training	\$30,035	\$10.61	\$16.36
43-4199	Information and Record Clerks, All Other	80	Short-term on-the-job training	\$30,783	\$10.19	\$17.10
41-9022	Real Estate Sales Agents	60	Postsecondary vocational training	\$52,041	\$13.63	\$30.71
41-9099	Sales and Related Workers, All Other	60	Moderate-term on-the-job training	\$45,200	\$10.02	\$27.59
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	60	Short-term on-the-job training	\$33,727	\$12.24	\$18.20
15-1099	Computer Specialists, All Other	50	Associate degree	\$52,303	\$13.05	\$31.19
41-2022	Parts Salespersons	50	Moderate-term on-the-job training	\$31,425	\$10.29	\$17.52

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43-9022	Word Processors and Typists	50	Moderate-term on-the-job training	\$29,498	\$11.49	\$15.53
43-4031	Court, Municipal, and License Clerks	50	Short-term on-the-job training	\$32,932	\$11.24	\$18.13
43-5111	Weighers, Measurers, Checkers, and Samplers, Recordkeeping	50	Short-term on-the-job training	\$29,017	\$10.08	\$15.89
<b>Logistics</b>						
53-3032	Truck Drivers, Heavy and Tractor-Trailer	1,520	Moderate-term on-the-job training	\$38,070	\$12.82	\$21.04
49-3023	Automotive Service Technicians and Mechanics	420	Postsecondary vocational training	\$34,887	\$10.69	\$19.81
53-7051	Industrial Truck and Tractor Operators	390	Short-term on-the-job training	\$29,931	\$10.80	\$16.18
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	180	Postsecondary vocational training	\$38,106	\$13.42	\$20.77
47-4051	Highway Maintenance Workers	120	Moderate-term on-the-job training	\$32,736	\$10.98	\$18.12
49-3021	Automotive Body and Related Repairers	100	Long-term on-the-job training	\$36,298	\$12.36	\$20.00
43-5032	Dispatchers, Except Police, Fire, and Ambulance	90	Moderate-term on-the-job training	\$34,920	\$11.39	\$19.49
53-3021	Bus Drivers, Transit and Intercity	90	Moderate-term on-the-job training	\$32,920	\$10.33	\$18.57
43-5031	Police, Fire, and Ambulance Dispatchers	50	Moderate-term on-the-job training	\$36,058	\$14.01	\$19.00
<b>Other</b>						
33-3051	Police and Sheriff's Patrol Officers	340	Long-term on-the-job training	\$45,269	\$15.16	\$25.07
33-3012	Correctional Officers and Jailers	270	Moderate-term on-the-job training	\$36,920	\$14.83	\$19.21
43-5052	Postal Service Mail Carriers	220	Short-term on-the-job training	\$43,449	\$17.07	\$22.80
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	60	Long-term on-the-job training	\$47,999	\$14.85	\$27.19
53-7081	Refuse and Recyclable Material Collectors	60	Short-term on-the-job training	\$39,607	\$10.24	\$23.44
27-3091	Interpreters and Translators	50	Long-term on-the-job training	\$38,499	\$12.95	\$21.29
51-8031	Water and Liquid Waste Treatment Plant and System Operators	50	Long-term on-the-job training	\$36,084	\$11.03	\$20.50

### Notes

(1) **Total openings** are the sum of new jobs and replacements, and indicate how many new people are needed to enter a given occupation. Replacements are an estimate of the number of job openings expected because people have permanently left a given occupation. Permanent exits occur if someone dies, retires, or otherwise leaves the labor force. Openings resulting from people changing employers, but staying in the same occupation are not included. Permanent exits also include openings resulting from someone permanently changing occupations. For example, a person leaves their job as a cashier and becomes a truck driver.

(2) **Typical Education and Training Path** gives a general indication of the education or training typically needed in a given occupation. There may be other pathways into the occupation, as well as additional educational, training, or licensing requirements. In those set off by *italics*, the Wisconsin case differs from the standard BLS description by including post-secondary vocational training and/or specifying apprenticeship.

**Short-Term On-the-Job Training:** These occupations require no more than one month of on-the-job training and the training usually happens at the workplace.

**Moderate-Term On-the-Job Training:** Training for these occupations usually occurs at the workplace and lasts from one to twelve months.

**Long-Term On-the-Job Training:** These occupations require more than one year of on-the-job training, or combined work experience and classroom instruction.

**Postsecondary Vocational Training:** These formal training programs last from a few weeks to more than a year, and are offered at vocational or technical schools.

**Associate Degree:** This degree requires two years of full-time academic work beyond high school.

(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) **Entry Level Hourly Wage** is the average of the lower third of wages that are paid in a given occupation.

(5) **Experienced Hourly Wage** is the average of the upper two-thirds of wages that are paid in a given occupation.

(6) Depending upon the specific position and employer either an Associate or Bachelor's degree are most common.