

Key Middle-Skill Opportunities in Wisconsin

Developed by the Center on Wisconsin Strategy for RISE

January 15, 2008

This list was compiled from Wisconsin Department of Workforce Development data screened for jobs that have a minimum of 50 projected openings per year (2004-2014), 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	22	4,520
Manufacturing	30	4,690
Health Care	17	5,270
Clerical/Sales	22	7,490
Logistics	9	3,390
Other	5	900
Total	105	26,260

DETAIL						
SOC Code	Occupational Title	Avg Annual Openings ¹	Typical Education and Training Path ²	Average Annual Salary ³	Entry Level Wage ⁴	Exper. Hourly Wage ⁵
Construction and Utilities						
47-2031	Carpenters	1,150	Long-term on-the-job training, apprenticeship	\$38,602	\$12.93	\$21.37
47-2111	Electricians	480	Long-term on-the-job training, apprenticeship	\$47,298	\$16.27	\$25.97
47-2152	Plumbers, Pipefitters, and Steamfitters	430	Long-term on-the-job training, apprenticeship	\$52,075	\$17.49	\$28.81
47-2073	Operating Engineers and Other Construction Equipment Operators	320	Moderate-term on-the-job training	\$43,669	\$15.38	\$23.80
47-2061	Construction Laborers	310	Moderate-term on-the-job training	\$33,988	\$10.76	\$19.13
47-2141	Painters, Construction and Maintenance Heating, Air Conditioning, and Refrigeration Mechanics and Installers	250	Moderate-term on-the-job training	\$34,948	\$10.42	\$19.99
49-9021		240	Long-term on-the-job training, apprenticeship	\$39,795	\$13.04	\$22.18
47-2051	Cement Masons and Concrete Finishers	190	Moderate-term on-the-job training	\$37,515	\$12.61	\$20.75
47-2181	Roofers	150	Moderate-term on-the-job training	\$34,180	\$11.41	\$18.94
49-9099	Installation, Maintenance, and Repair Workers, All Other	140	Moderate-term on-the-job training	\$35,523	\$10.83	\$20.20
47-2021	Brickmasons and Blockmasons	130	Long-term on-the-job training, apprenticeship	\$48,083	\$16.55	\$26.40
49-9052	Telecommunications Line Installers and Repairers	110	Long-term on-the-job training, apprenticeship	\$37,089	\$12.21	\$20.64
17-3023	Electrical and Electronic Engineering Technicians	80	Associate degree	\$45,020	\$16.10	\$24.41
49-9051	Electrical Power-Line Installers and Repairers	80	Long-term on-the-job training, apprenticeship	\$52,326	\$19.85	\$27.81
49-2022	Telecommunications Equipment Installers and Repairers, Except Line Installers	70	Postsecondary vocational training	\$48,174	\$18.03	\$25.73
47-2081	Drywall and Ceiling Tile Installers	60	Moderate-term on-the-job training	\$41,030	\$12.53	\$23.32
47-2221	Structural Iron and Steel Workers	60	Long-term on-the-job training, apprenticeship	\$42,998	\$12.68	\$24.67
47-3011	Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	60	Short-term on-the-job training	\$29,300	\$10.02	\$16.12

SOC Code	Occupational Title	Avg Annual Openings ¹	Typical Education and Training Path ²	Average Annual Salary ³	Entry Level Wage ⁴	Exper. Hourly Wage ⁵
49-3042	Mobile Heavy Equipment Mechanics, Except Engines	60	Postsecondary vocational training	\$40,309	\$15.74	\$21.20
17-3022	Civil Engineering Technicians	50	Associate degree	\$42,505	\$15.39	\$22.96
17-3029	Engineering Technicians, Except Drafters, All Other	50	Associate degree	\$46,429	\$16.43	\$25.27
47-2041	Carpet Installers	50	Moderate-term on-the-job training	\$37,408	\$11.10	\$21.43
Manufacturing						
51-4041	Machinists	420	<i>Postsecondary vocational training, apprenticeship</i>	\$36,206	\$12.79	\$19.72
51-4121	Welders, Cutters, Solderers, and Brazers	400	Postsecondary vocational training	\$33,618	\$12.69	\$17.90
51-4031	Cutting, Punching, and Press Machine Setters, Operators, and Tenders, Metal and Plastic	270	Moderate-term on-the-job training	\$28,868	\$10.00	\$15.82
51-4072	Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	210	Moderate-term on-the-job training	\$28,838	\$10.23	\$15.68
47-2211	Sheet Metal Workers	190	<i>Long-term on-the-job training, apprenticeship</i>	\$44,323	\$13.55	\$25.19
51-9196	Paper Goods Machine Setters, Operators, and Tenders	180	Moderate-term on-the-job training	\$34,522	\$11.89	\$18.95
49-9041	Industrial Machinery Mechanics	160	<i>Postsecondary vocational training, apprenticeship</i>	\$42,137	\$15.37	\$22.70
51-4011	Computer-Controlled Machine Tool Operators, Metal and Plastic	130	Moderate-term on-the-job training	\$34,853	\$11.82	\$19.22
51-4081	Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	130	<i>Postsecondary vocational training</i>	\$33,487	\$11.90	\$18.20
51-9121	Coating, Painting, and Spraying Machine Setters, Operators, and Tenders	130	Moderate-term on-the-job training	\$31,670	\$11.01	\$17.33
17-3013	Mechanical Drafters	110	Postsecondary vocational training	\$42,888	\$14.93	\$23.47
51-2041	Structural Metal Fabricators and Fitters	110	Moderate-term on-the-job training	\$34,877	\$13.63	\$18.34
51-4033	Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	110	Moderate-term on-the-job training	\$31,653	\$10.81	\$17.42
51-9023	Mixing and Blending Machine Setters, Operators, and Tenders	110	Moderate-term on-the-job training	\$31,952	\$11.05	\$17.52
51-4111	Tool and Die Makers	100	<i>Postsecondary vocational training, apprenticeship</i>	\$44,111	\$16.56	\$23.53
51-9032	Cutting and Slicing Machine Setters, Operators, and Tenders	90	Moderate-term on-the-job training	\$31,979	\$10.99	\$17.57
51-4021	Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	80	Moderate-term on-the-job training	\$29,125	\$10.01	\$16.00
51-4032	Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	70	Moderate-term on-the-job training	\$31,403	\$10.35	\$17.47
51-4122	Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	70	Moderate-term on-the-job training	\$32,175	\$11.09	\$17.66
51-9012	Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	70	Moderate-term on-the-job training	\$35,536	\$12.18	\$19.54
17-3026	Industrial Engineering Technicians	60	Associate degree	\$40,798	\$15.12	\$21.86
49-9043	Maintenance Workers, Machinery	60	Short-term on-the-job training	\$34,730	\$11.36	\$19.37
49-9044	Millwrights	60	<i>Postsecondary vocational training, apprenticeship</i>	\$49,479	\$18.22	\$26.57
51-4034	Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	60	Moderate-term on-the-job training	\$32,667	\$11.48	\$17.82
51-4199	Metal Workers and Plastic Workers, All Other	60	Moderate-term on-the-job training	\$47,269	\$13.56	\$27.31
51-2031	Engine and Other Machine Assemblers	50	Short-term on-the-job training	\$38,051	\$12.52	\$21.18
49-9042	Maintenance and Repair Workers, General	830	<i>Postsecondary vocational training, apprenticeship</i>	\$34,576	\$11.49	\$19.19
51-5023	Printing Machine Operators	230	Moderate-term on-the-job training	\$35,902	\$11.99	\$19.90
51-5022	Prepress Technicians and Workers	70	Postsecondary vocational training	\$35,447	\$11.84	\$19.64
51-5021	Job Printers	70	Long-term on-the-job training	\$34,741	\$11.51	\$19.30

SOC Code	Occupational Title	Avg Annual Openings ¹	Typical Education and Training Path ²	Average Annual Salary ³	Entry Level Wage ⁴	Exper. Hourly Wage ⁵
Health Care (+)						
29-1111	Registered Nurses	2,610	Associate or Bachelor's degree ⁶	\$55,060	\$21.53	\$28.94
29-2061	Licensed Practical and Licensed Vocational Nurses	400	Postsecondary vocational training	\$36,842	\$14.81	\$19.16
31-9092	Medical Assistants	390	Moderate-term on-the-job training	\$27,441	\$10.98	\$14.30
31-9091	Dental Assistants	330	Moderate-term on-the-job training	\$28,602	\$10.78	\$15.23
29-2021	Dental Hygienists	210	Associate degree	\$54,203	\$23.01	\$27.58
29-2034	Radiologic Technologists and Technicians	210	Associate degree	\$46,916	\$17.91	\$24.88
31-9094	Medical Transcriptionists	210	Postsecondary vocational training	\$29,857	\$11.83	\$15.62
43-6013	Medical Secretaries	180	Postsecondary vocational training	\$28,471	\$10.89	\$15.09
29-2012	Medical and Clinical Laboratory Technicians	110	Associate degree	\$34,900	\$13.37	\$18.48
19-4099	Life, Physical, and Social Science Technicians, All Other	100	Associate degree	\$35,981	\$13.15	\$19.37
29-1126	Respiratory Therapists	100	Associate degree	\$47,309	\$18.81	\$24.71
29-2055	Surgical Technologists	100	Postsecondary vocational training	\$40,055	\$15.38	\$21.20
29-2099	Health Technologists and Technicians, All Other	100	Postsecondary vocational training	\$36,103	\$11.98	\$20.04
31-2021	Physical Therapist Assistants	60	Associate degree	\$38,342	\$14.75	\$20.28
29-2032	Diagnostic Medical Sonographers	50	Associate degree	\$66,410	\$25.54	\$35.12
29-9099	Healthcare Practitioners and Technical Workers, All Other	50	Postsecondary vocational training	\$38,363	\$11.90	\$21.72
29-2056	Veterinary Technologists and Technicians	60	Associate degree	\$27,233	\$10.00	\$14.64
Clerical/Sales						
43-4051	Customer Service Representatives	1,560	Moderate-term on-the-job training	\$30,262	\$10.03	\$16.81
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1,320	Moderate-term on-the-job training	\$57,978	\$15.20	\$34.21
43-6011	Executive Secretaries and Administrative Assistants	980	Moderate-term on-the-job training	\$34,427	\$12.03	\$18.81
43-6014	Secretaries, Except Legal, Medical, and Executive	860	Postsecondary vocational training	\$27,426	\$10.06	\$14.75
41-4011	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	310	Moderate-term on-the-job training	\$67,950	\$19.44	\$39.28
15-1041	Computer Support Specialists	270	Associate degree	\$38,897	\$13.43	\$21.34
43-3011	Bill and Account Collectors	260	Short-term on-the-job training	\$28,586	\$10.63	\$15.30
41-3099	Sales Representatives, Services, All Other	250	Moderate-term on-the-job training	\$56,183	\$13.10	\$33.97
43-5061	Production, Planning, and Expediting Clerks	230	Short-term on-the-job training	\$38,840	\$13.45	\$21.28
43-3021	Billing and Posting Clerks and Machine Operators	200	Moderate-term on-the-job training	\$28,135	\$10.87	\$14.86
43-3051	Payroll and Timekeeping Clerks	180	Moderate-term on-the-job training	\$30,645	\$10.74	\$16.73
43-9041	Insurance Claims and Policy Processing Clerks	170	Moderate-term on-the-job training	\$29,410	\$10.99	\$15.72
13-1031	Claims Adjusters, Examiners, and Investigators	160	Long-term on-the-job training	\$45,741	\$14.14	\$25.92
43-4161	Human Resources Assistants, Except Payroll and Timekeeping	140	Postsecondary vocational training	\$32,795	\$12.00	\$17.65
43-6012	Legal Secretaries	130	Postsecondary vocational training	\$32,816	\$11.44	\$17.94
41-3011	Advertising Sales Agents	90	Moderate-term on-the-job training	\$41,833	\$10.89	\$24.73

SOC Code	Occupational Title	Avg Annual Openings ¹	Typical Education and Training Path ²	Average Annual Salary ³	Entry Level Wage ⁴	Exper. Hourly Wage ⁵
23-2011	Paralegals and Legal Assistants	80	Associate degree	\$41,414	\$13.81	\$22.96
41-9022	Real Estate Sales Agents	70	Postsecondary vocational training	\$51,163	\$13.57	\$30.11
43-9022	Word Processors and Typists	70	Moderate-term on-the-job training	\$29,444	\$10.92	\$15.77
43-4131	Loan Interviewers and Clerks	60	Short-term on-the-job training	\$29,870	\$10.76	\$16.16
43-4031	Court, Municipal, and License Clerks	50	Short-term on-the-job training	\$32,571	\$10.69	\$18.15
43-9011	Computer Operators	50	Moderate-term on-the-job training	\$34,500	\$11.56	\$19.10
Logistics						
53-3032	Truck Drivers, Heavy and Tractor-Trailer	1,570	Moderate-term on-the-job training	\$36,797	\$12.60	\$20.24
49-3023	Automotive Service Technicians and Mechanics	630	Postsecondary vocational training	\$33,749	\$10.35	\$19.16
53-7051	Industrial Truck and Tractor Operators	430	Short-term on-the-job training	\$29,323	\$10.62	\$15.83
49-3031	Bus and Truck Mechanics and Diesel Engine Specialists	230	Postsecondary vocational training	\$36,184	\$12.86	\$19.66
47-4051	Highway Maintenance Workers	140	Moderate-term on-the-job training	\$32,034	\$11.41	\$17.40
53-3021	Bus Drivers, Transit and Intercity	140	Moderate-term on-the-job training	\$34,154	\$10.59	\$19.34
49-3021	Automotive Body and Related Repairers	110	Long-term on-the-job training	\$34,394	\$11.31	\$19.15
43-5032	Dispatchers, Except Police, Fire, and Ambulance	90	Moderate-term on-the-job training	\$33,733	\$10.78	\$18.94
49-3041	Farm Equipment Mechanics	50	Postsecondary vocational training	\$30,386	\$10.96	\$16.43
Other						
33-3051	Police and Sheriff's Patrol Officers	350	Long-term on-the-job training	\$44,433	\$16.09	\$24.00
43-5052	Postal Service Mail Carriers	220	Short-term on-the-job training	\$43,255	\$15.63	\$23.38
33-3012	Correctional Officers and Jailers	140	Moderate-term on-the-job training	\$35,074	\$14.23	\$18.18
43-5053	Postal Service Mail Sorters, Processors, and Processing Machine Operators	100	Short-term on-the-job training	\$41,705	\$14.76	\$22.70
13-1041	Compliance Officers, Except Agriculture, Construction, Health and Safety, and Transportation	90	Long-term on-the-job training	\$52,524	\$16.84	\$29.46

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 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.