

Dane County Workforce Housing Gap Fact Sheet

Cities and regions across the country recognize that housing is a workforce development and economic development issue. This fact sheet¹ outlines Dane County's workforce and the gap between what workers earn and the housing they can afford.

What is "Workforce Housing"?

"Workforce housing" can mean many different things. Some use the term to focus on households with income between 60-percent of area median income (AMI) to 100-percent of AMI because these households have incomes *too high* to access federal or state housing assistance programs but *too low* to afford the range of housing options in communities where they work. Others use a more expansive definition of workforce housing to include the entire workforce in an area. We adopt this definition for this factsheet: workforce housing is housing for the workforce in an area.

What is the Workforce Housing Gap?

The workforce housing gap is the difference between a family's "housing budget" (what they can afford² based on how much they earn) and the cost of housing. When there is a lack of supply of housing that workers can afford, workers live farther away from work or spend more than half of their income on housing. For employers, this can make attracting and retaining a workforce more difficult. For workers this can mean not having adequate time or money to spend on necessities like education, health care, food, transportation, day care, etc.

In a research study examining this gap in all large urban counties in the United States, I find that Dane County ranks 19th worst for workforce housing affordability.³

Who is Dane County's Workforce?

Table 1 shows the distribution of employment within Dane County by sector. The top three sectors for employment are health care, retail trade, and accommodation/food services), which employ 38 percent of all Dane County workers.

Table 2 presents data on the distribution of actual wages for major occupations within the Madison metropolitan region in 2015.⁴ For each occupation, the data show actual wages at different levels of skill and experience. The *10th percentile annual wage* approximates a "starting wage." The *25th percentile annual wage* could reflect workers with additional skill/training or with a few years of experience. The *50th percentile annual wage* (also called the "median wage") is a good measure of an occupation's wage structure, because half of all workers make above the median wage and half make less. The *90th percentile annual wage* would reflect workers with the highest levels of skill or training or experience within the occupation.

¹ This fact sheet was prepared by Prof. Kurt Paulsen, UW-Madison, Dept. of Urban and Regional Planning.

² The standard definition of affordability under all federal and state housing programs is that a household should spend no more than 30 percent of their income on housing costs.

³ Workforce housing affordability here was defined as the percent of very-low-income renters paying more than 50-percent of their income on rent. Large urban counties were the 250 most populous counties in the U.S.

⁴ Detailed occupational data are only available at the metropolitan statistical area (MSA) level, not at the county level. The Madison metropolitan region includes Dane County as well as Columbia, Green, and Iowa counties. Dane County comprises 82 percent of the metropolitan area population, so the regional occupational data are a very good representation of Dane County's workforce.

Table 1. Employees by industry sector, Dane County (2014)

Industry sector (NAICS)	Industry name	Number of employees	% of county employment
62	Health care and social assistance	45,566	17.0%
44-45	Retail trade	31,147	11.6%
72	Accommodation and food services	25,946	9.7%
31-33	Manufacturing	23,620	8.8%
52	Finance and insurance	23,131	8.6%
54	Professional, scientific, and technical services	20,711	7.7%
56	Administrative and support and waste management and remediation services	16,821	6.3%
51	Information	14,848	5.5%
81	Other services (except public administration)	13,162	4.9%
42	Wholesale trade	12,727	4.8%
23	Construction	12,238	4.6%
55	Management of companies and enterprises	7,005	2.6%
48-49	Transportation and warehousing	6,529	2.4%
71	Arts, entertainment, and recreation	4,209	1.6%
53	Real estate and rental and leasing	4,138	1.5%
61	Educational services	3,448	1.3%
22	Utilities	1,698	0.6%
11	Agriculture, forestry, fishing and hunting	605	0.2%
21	Mining, quarrying, and oil and gas extraction	125	0.0%
	Total	267,697	

Notes: Data Source: US Census Bureau, County Business Patterns. Data are for 2014, and represent the estimated number of paid employees as of March 12th of that year. Totals may not add because some employees are in industries not currently classified or not disclosed.

The Workforce Housing Gap in Dane County.

The workforce housing shortage has the greatest impact on workers in occupations that pay the lowest annual wages. Table 3 shows 25 specific occupations with the lowest annual median wages that employ over 1000 people in the region. These 25 occupations employ over 78,000 people, which is 21 percent of the region’s workforce.

The last row in Table 3 shows the average wages for these 25 high-employment, lower-wage occupations. At the 25th percentile, average annual wages of \$19,343 would mean that a single worker could afford to spend \$484 per month on housing. If two workers in a household earn this wage, they could afford to spend \$967 per month on housing. At the 50th percentile, average annual wages of \$22,502 would mean that a single worker could afford to spend \$563 per month on housing, and a 2-earner family could afford to spend \$1125 per month on housing.

Table 2. Distribution of annual wages, by occupation, Madison metropolitan region (2015)

Occupation Code	Occupation Title	Employees	% of total employment	10 th percentile annual wage	25 th percentile annual wage	50 th percentile annual wage	90 th percentile annual wage
43-0000	Office and Administrative Support Occupations	58,550	15.68%	\$20,470	\$26,950	\$34,800	\$56,330
41-0000	Sales and Related Occupations	33,490	8.97%	\$16,880	\$18,980	\$27,480	\$77,690
35-0000	Food Preparation and Serving Related Occupations	29,050	7.78%	\$16,330	\$17,670	\$20,160	\$34,480
51-0000	Production Occupations	25,630	6.86%	\$20,650	\$25,500	\$32,720	\$53,600
25-0000	Education, Training, and Library Occupations	25,380	6.80%	\$23,600	\$29,940	\$44,320	\$94,810
13-0000	Business and Financial Operations Occupations	25,190	6.75%	\$37,830	\$47,380	\$60,080	\$96,220
29-0000	Healthcare Practitioners and Technical Occupations	22,480	6.02%	\$34,080	\$48,650	\$67,020	\$134,210
15-0000	Computer and Mathematical Occupations	20,060	5.37%	\$42,010	\$55,500	\$72,110	\$107,140
11-0000	Management Occupations	19,880	5.32%	\$45,230	\$67,410	\$93,600	\$171,820
53-0000	Transportation and Material Moving Occupations	19,550	5.23%	\$18,970	\$24,070	\$32,040	\$54,700
47-0000	Construction and Extraction Occupations	13,270	3.55%	\$30,560	\$40,140	\$53,090	\$81,180
39-0000	Personal Care and Service Occupations	12,010	3.22%	\$17,090	\$19,560	\$22,690	\$38,870
49-0000	Installation, Maintenance, and Repair Occupations	11,860	3.18%	\$26,110	\$33,540	\$44,060	\$71,070
37-0000	Building and Grounds Cleaning and Maintenance Occupations	11,530	3.09%	\$16,750	\$18,750	\$23,400	\$38,360
31-0000	Healthcare Support Occupations	8,840	2.37%	\$21,280	\$25,430	\$30,670	\$45,140
17-0000	Architecture and Engineering Occupations	8,210	2.20%	\$41,750	\$53,400	\$68,410	\$104,900
33-0000	Protective Service Occupations	6,730	1.80%	\$19,160	\$22,940	\$36,000	\$71,800
19-0000	Life, Physical, and Social Science Occupations	6,700	1.79%	\$33,110	\$41,700	\$56,640	\$98,320
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	6,410	1.72%	\$21,170	\$32,260	\$44,920	\$79,100
21-0000	Community and Social Service Occupations	5,550	1.49%	\$22,960	\$30,830	\$42,240	\$67,920
23-0000	Legal Occupations	2,640	0.71%	\$38,940	\$50,390	\$69,830	\$150,770
45-0000	Farming, Fishing, and Forestry Occupations	430	0.12%	\$18,550	\$23,030	\$29,720	\$47,980
	All Occupations	373,460		\$19,080	\$25,940	\$39,160	\$89,360

Notes: Data source is US Dept. of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES) database for 2015. Detailed occupational data are only available at the Metropolitan Statistical Area (MSA) geography. Madison MSA contains Dane, Columbia, Green, and Iowa counties. Some detailed occupational data are not released due to confidentiality restrictions. Occupational codes follow the Standard Occupational Classification system (SOC). The 50th percentile is also called the median.

Table 3. 25 lowest median wage occupations in high-employment occupations (over 1000 employees), Madison metropolitan region (2015)

Occupation Code	Occupation Title	Employees	10 th percentile annual wage	25 th percentile annual wage	50 th percentile annual wage
41-2031	Retail Salespersons	10,790	\$16,550	\$18,140	\$21,600
35-3021	Combined Food Preparation and Serving Workers, Incl. Fast Food	8,340	\$16,010	\$16,850	\$18,250
41-2011	Cashiers	6,880	\$16,100	\$17,050	\$18,650
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	6,230	\$16,490	\$18,130	\$22,060
39-9021	Personal Care Aides	5,970	\$17,410	\$20,030	\$22,010
35-3031	Waiters and Waitresses	5,250	\$16,520	\$18,210	\$22,940
43-5081	Stock Clerks and Order Fillers	4,290	\$16,990	\$19,150	\$23,410
35-2014	Cooks, Restaurant	2,940	\$18,380	\$20,600	\$22,780
35-3011	Bartenders	2,920	\$16,250	\$17,490	\$19,640
25-9041	Teacher Assistants	2,310	\$18,460	\$21,530	\$26,500
37-3011	Landscaping and Groundskeeping Workers	2,120	\$18,740	\$21,900	\$26,730
37-2012	Maids and Housekeeping Cleaners	2,110	\$16,370	\$17,750	\$20,250
33-9032	Security Guards	1,820	\$17,690	\$20,140	\$22,990
25-2011	Preschool Teachers, Except Special Education	1,810	\$20,180	\$22,620	\$26,690
51-9111	Packaging and Filling Machine Operators and Tenders	1,670	\$17,130	\$19,410	\$23,170
31-1011	Home Health Aides	1,570	\$20,040	\$21,710	\$24,510
35-2021	Food Preparation Workers	1,540	\$16,520	\$18,010	\$20,380
41-2021	Counter and Rental Clerks	1,520	\$16,300	\$17,520	\$19,610
25-3098	Substitute Teachers	1,520	\$17,870	\$23,320	\$27,630
35-9021	Dishwashers	1,290	\$16,100	\$17,140	\$18,860
43-3071	Tellers	1,210	\$19,910	\$22,010	\$25,590
51-9199	Production Workers, All Other	1,200	\$19,200	\$20,980	\$23,330
53-3031	Driver/Sales Workers	1,190	\$16,660	\$18,160	\$21,350
39-5012	Hairdressers, Hairstylists, and Cosmetologists	1,170	\$16,760	\$18,680	\$24,930
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	1,090	\$16,050	\$17,040	\$18,680
All 25 lowest-wage high-employment occupations		78,750	\$17,387	\$19,343	\$22,502

Notes: Data source is US Dept. of Labor, Bureau of Labor Statistics, Occupational Employment Statistics (OES) database for 2015. Detailed occupational data are only available at the Metropolitan Statistical Area (MSA) geography. Madison MSA contains Dane, Columbia, Green, and Iowa counties. Some detailed occupational data are not released due to confidentiality restrictions. Occupational codes follow the Standard Occupational Classification system (SOC). The 50th percentile is also called the median.