

Construction Workers: Settling In

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Because of the nature of the construction process and the structure of construction industry, employment in the construction trades is less stable and secure than careers in most other occupations. This, in turn, is one of the barriers to attracting talented people into the construction industry.

Analysis of data from the Current Population Survey (CPS) reveals, however, that although workers in the construction trades are more likely to experience periods of unemployment, and more likely to change employers, than the average worker in other fields, the differences are small. Moreover, the differences between construction and other fields have narrowed substantially over the past decade. In 2002, more than 87 percent of wage and salary workers in the construction trades, and of all payroll employees in the construction industry, worked for only one employer (not counting simultaneous second jobs). Less than 5 percent faced multiple episodes of unemployment.

In 2001, the share of workers in the construction trades who were employed for all 52 weeks of the year (including paid time off) was 72 percent, not far below the 77 percent share for all workers. In the early 1990s, less than 60 percent of construction workers were employed for 52 weeks, and more than 20 percent worked for 2 or more firms in the course of a year.

Instability of construction worker employment reflects the characteristics of the people employed in the construction trades, as well as the nature of the work. Construction

trade workers are younger, on average, than workers in other industries. Only 30 percent of workers in the construction trades in March 2003 were age 45 or older, versus 38 percent for the overall civilian labor force. Moreover, 16 percent of construction trades workers were not U.S. citizens, compared to 9 percent of all workers.

Nature of Construction Employment

Data on construction employment are not reported separately for residential and nonresidential construction, even though most workers tend to specialize in one type or the other. Residential construction probably accounts for slightly less than half of all on-site construction industry employment.

Construction trades occupations include skilled workers such as carpenters, electricians, painters, or plumbers, as well as working job-site supervisors. The government's system for classifying occupations was recently changed. The new grouping "construction and extraction occupations" includes construction laborers, previously counted in a separate category for less skilled workers, as well as some other previously-excluded groups. Use of the new category in the CPS for March 2003, resulted in a total labor force of 8.9 million, compared to 6.6 million for Construction Trades in March 2002.

Construction trades workers account for about two-thirds of all jobs in the construction industry. The other third of workers in the industry are in finance, sales, administration, and other off-site activities. About one-sixth of workers in the construc-

tion trades are employed in other industries, such as utilities.

Most construction trades workers employed in the construction industry do not work directly for general contractors or merchant builders, but instead work for special trade contractors, who serve as subcontractors for the builder or general contractor. The 1997 Census of Construction found that 2.7 million of 4.3 million construction workers reported as employees in the construction industry were employed by special trade contractors. Of the remainder, about 700,000 were employed by contractors involved in non-building construction such as roads or water and sewer systems.

About one-fifth of those working in construction are self-employed, including about 4 percent working for a corporation that they own. Some of the self-employed workers in construction have other workers as employees, but the majority are lone operators.¹ Among all civilian workers, about 10 percent are self-employed. The unincorporated self-employed share of construction workers has trended downward somewhat over the past decade.

Worker Demographics

Table 1 shows some of the characteristics of detailed components of the construction worker occupation grouping, as well as broad categories of workers in other occupations, as reported in the 2000 Census. These categories are based on the new classification system.

Nearly all construction trades workers are male. In 2002, under the old occupational category system, only 2.4 percent of skilled construction trades workers and 3.9 percent of

Table 1. Characteristics of Labor Force by Occupation

Occupation	All 1999 Workers (000s)		Median Earnings 1999	Median Age	Educ. Beyond High Sch.	Foreign-Born		Hispanic	Female	Full-time Year-round**	
	Total	Constr. Industry				Citizen	Non-Citizen			Number	Median Earnings
Managers (x Constr)	19,769	517	38,000	43	79.7%	5.5%	4.5%	6.1%	44.0%	14,084	45,000
Construction manager	731	691	42,000	43	61.0%	4.0%	4.5%	6.1%	6.5%	536	50,000
Professional	31,365	245	31,000	41	89.4%	5.9%	5.5%	5.8%	56.8%	16,675	42,000
Service	27,385	111	10,000	35	36.9%	5.8%	10.6%	15.6%	57.9%	9,943	21,000
Sales	19,507	137	14,800	37	54.4%	4.9%	5.8%	9.5%	53.8%	9,123	32,000
Office/administration	25,995	705	18,000	39	57.4%	4.7%	4.4%	9.8%	75.1%	13,366	26,000
Farm, forest	1,520	5	9,000	36	17.8%	6.0%	28.8%	39.0%	24.9%	487	19,000
All construction occs.	9,411	7,847	25,000	37	28.9%	4.0%	12.5%	18.1%	3.3%	4,953	30,000
All occs. ex. supervisors	8,317	6,908	24,000	37	27.4%	4.0%	13.4%	19.1%	3.3%	4,189	30,000
Skilled workers*	6,543	5,242	25,000	37	29.1%	3.8%	11.3%	16.5%	3.2%	3,494	30,000
Construction											
Supervisor	1,094	939	35,000	42	40.4%	3.7%	5.6%	10.3%	2.9%	764	40,000
Boilermaker	29	9	30,000	42	30.4%	3.3%	5.7%	10.8%	5.4%	14	40,000
Brick mason	266	251	20,000	37	18.5%	4.0%	14.7%	17.7%	1.0%	112	30,000
Carpenter	1,728	1,520	20,000	38	28.9%	3.7%	11.5%	15.7%	2.0%	869	28,000
Carpet, floor	267	205	20,000	35	21.4%	4.8%	14.9%	22.8%	3.0%	131	29,300
Cement, concrete	117	113	20,000	37	16.8%	4.8%	16.3%	27.1%	1.3%	50	26,900
Laborer	1,668	1,572	15,000	33	21.3%	4.7%	21.4%	28.8%	3.9%	659	25,000
Paving equipment operator	22	21	20,800	36	14.7%	0.8%	5.1%	9.1%	4.2%	7	25,000
Pile driver	2	2	45,000	44	37.3%	7.0%	3.8%	10.8%	3.2%	1	55,000
Op engineer	437	347	27,000	41	21.1%	1.9%	3.9%	8.5%	2.5%	247	31,000
Drywall	243	237	19,200	34	16.3%	3.6%	22.7%	30.4%	3.0%	114	25,500
Electrician	850	550	30,500	39	48.0%	4.4%	5.3%	8.9%	2.4%	578	37,000
Glazier	63	28	26,000	35	24.2%	2.8%	6.1%	15.8%	4.8%	44	32,000
Insulation	47	41	24,000	34	22.1%	3.9%	15.7%	24.0%	3.9%	28	25,600
Painter	744	645	15,600	38	25.5%	5.3%	20.0%	25.2%	7.9%	309	25,000
Paperhanger	23	20	15,000	45	42.1%	1.6%	3.3%	4.9%	37.3%	9	28,000
Pipe, plumber	665	496	28,000	39	31.2%	3.4%	6.7%	12.7%	1.6%	418	35,000
Plaster, stucco	54	52	20,000	36	17.5%	9.3%	27.4%	36.0%	2.0%	25	26,000
Rebar workers	6	5	25,000	35	10.6%	1.9%	23.3%	30.4%	2.0%	4	30,000
Roofer	304	296	15,400	33	15.5%	3.6%	19.9%	26.6%	1.7%	118	23,000
Sheet metal	195	106	28,800	38	34.6%	3.1%	5.6%	11.6%	4.1%	128	33,000
Structural iron & steel	98	76	30,000	38	28.5%	1.9%	4.1%	8.0%	2.0%	50	35,400
Helpers	106	94	10,000	27	18.2%	3.1%	18.6%	27.7%	4.9%	35	20,000
Inspector	95	34	33,000	48	66.7%	3.5%	2.2%	6.1%	10.1%	64	39,000
Elevator installers	31	27	45,000	40	40.2%	5.8%	2.5%	6.5%	1.6%	22	53,000
Fencer	39	32	15,000	33	20.4%	4.2%	13.5%	22.3%	1.7%	18	22,000
Hazmat removal	29	4	23,000	36	34.3%	3.5%	21.6%	29.5%	8.1%	16	30,000
Highway maintenance	118	99	24,000	42	24.0%	1.7%	4.8%	10.1%	4.4%	75	28,600
Rail	16	1	35,000	45	24.1%	2.1%	5.2%	12.5%	2.9%	10	39,200
Septic & sewer	11	1	19,000	36	18.9%	1.1%	1.6%	4.0%	0.9%	6	27,300
Misc. construction	46	25	20,000	34	25.3%	3.9%	11.4%	20.9%	3.7%	26	27,000
Extraction	177	26	27,000	39	24.7%	1.5%	4.2%	11.9%	3.7%	102	34,000
Install/Repair	6,399	534	28,000	40	40.9%	4.6%	6.5%	11.6%	5.1%	4,354	34,000
Production	14,651	297	20,000	40	29.3%	7.1%	12.6%	17.2%	35.5%	8,655	28,000
Transportation	10,746	370	18,000	39	28.7%	4.3%	8.9%	14.8%	17.0%	5,322	29,000
Military	434	-	22,000	27	62.9%	2.9%	2.6%	10.4%	10.7%	298	27,000
Total	150,934	10,422	23,900	39	57.1%	5.4%	7.3%	11.0%	46.8%	87,897	32,000

Source: 2000 Census 1% Public Use Microdata Sample

* Skilled workers includes all construction workers except Supervisors, Laborers, and Helpers.

** Full-time year-round workers are those who worked at least 50 weeks, 35 hours per week in 1999.

construction laborers were women. African-Americans were also underrepresented with only 6.5 percent of construction trades jobs, but their share of construction laborers was 9.7 percent, somewhat closer to the 10.9 percent African-American share of total employment in 2002.

While other minorities are underrepresented in construction occupations, the share of workers of Hispanic origin is large and has grown rapidly. The Bureau of Labor Statistics reported that 20.6 percent of construction trades and 33.3 percent of construction laborers were Hispanic/Latino in 2002. This was up from 16.4 percent and 27.7 percent, respectively, just two years earlier.

The Hispanic share of the total work force in 2002 was 12.2 percent. Of Hispanics in overall labor force, according to the 2000 Census, 48 percent were born in the U.S., and another 15 percent were naturalized citizens. Only 37 percent were not U.S. citizens. Among Hispanics in construction occupations working in the construction industry, however, more than 60 percent were non-citizens.

Non-citizen Hispanics, including those working in construction, were probably undercounted in the 2000 Census and in the Current Population Survey. While many of those non-citizens are legal permanent residents, others have more ambiguous or wholly-undocumented status.

There are few non-Hispanic immigrants in the construction work force. Although the majority of foreign-born workers in the U.S. labor force are not from Latin countries, Latinos represent more than 70 percent of foreign-born construction workers.

The construction trades include relatively few workers with extensive formal education. According to the CPS, less than 30 percent have gone

beyond a high school diploma, compared with 57 percent of all U.S. workers, and only 7 percent are college graduates, versus 28 percent of all workers. Construction workers may go through extensive training in their trades, but that knowledge may not be transferable to non-construction jobs, and the lack of credentials may limit their ability to pursue careers in other fields. On the other hand, construction trades offer opportunities to rapidly advance to supervisory positions or establish a separate business.

Given their lack of formal education and relative youth, workers in the construction trades don't do badly in terms of earnings. Year-round full-time construction trades workers earned a median of \$30,000 in 1999, according to the 2000 Census. That excludes laborers and supervisors, for whom median earnings were \$25,000 and \$40,000, respectively. The median for all year-round full-time workers was \$32,000.

Job Stability

There are a variety of measures, mainly from the CPS and other surveys, that provide some indication of the stability and security of employment in construction occupations.

Table 2 shows various measures of job stability based on the CPS. As noted above, in recent years an increased share of construction workers remained with one employer and were employed year-round. A declining share of construction workers experienced periods of unemployment. The differences with the early 1990s, when construction was in a severe slump, are understandable. But even relative to the late 1990s, when construction activity was high and there were labor shortages, these statistics indicate

that job stability for construction workers has increased. These statistics are based on people who were in the labor force (including those who were unemployed) at the time of the survey, in March of the next year. If all people who worked at any time during the year were included, and the industry and occupations were based on work in the preceding year, than at the time of the survey, the survey job stability would look a little worse for both construction workers and all workers.

Occasionally, as a supplement to the CPS, wage and salary workers are asked how long they have worked for their current employer. In January 2002, the median tenure for construction trades workers was 3.3 years, and for construction laborers 2.3 years, compared to 3.7 years for all workers. In earlier years, construction trades workers also reported tenures slightly shorter than the overall median. In 1996, for example, the median for construction trades was 3.5 years, compared to 3.8 years for all workers.

Job tenure tends to be much longer for older workers than for younger ones, and that alone might explain much of the difference between construction trades and the overall average. The median periods that people in sales and service occupations have worked for their current employers are generally much shorter than for construction trades.

Another statistic, the separation rate by industry, based on a survey of employers, measures the monthly share of all workers leaving employers due to quits, layoffs, discharges, or other reasons. Those data present a less stable picture of construction, relative to other industries. For the first eight months of 2003, the construction industry separation rate averaged 5.6 percent, compared to a 3.4 percent average for all private

Table 2. Work Experience During Year

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Labor Force - Following March (Thous)												
Total Civilian	124,942	125,716	128,889	130,908	132,118	135,010	136,796	138,106	140,474	141,770	143,897	145,331
Constr Industry	8,005	7,867	7,787	8,273	8,503	8,905	9,037	9,282	9,447	9,554	10,231	10,897
Constr Trades	5,305	5,362	5,325	5,455	5,459	5,804	5,990	6,024	6,147	6,331	6,637	8,935
Constr Laborers	878	783	805	958	890	959	954	1,108	1,079	1,085	1,249	NA
Wage and Salary Workers with Single Primary Employer												
Total Civilian	85.3%	85.5%	85.1%	83.8%	84.3%	84.4%	84.6%	84.2%	84.4%	84.6%	86.3%	87.6%
Constr Industry	79.1%	80.1%	80.5%	80.8%	81.3%	82.8%	83.1%	82.8%	82.5%	85.2%	85.0%	87.6%
Constr Trades	78.6%	79.2%	80.1%	80.4%	80.1%	82.4%	83.1%	83.6%	82.8%	86.4%	85.6%	87.2%
Constr Laborers	75.2%	76.3%	73.4%	76.7%	79.4%	77.5%	74.1%	81.0%	78.0%	81.8%	80.3%	NA
Wage and Salary Workers with 3 or More Primary Employers												
Total Civilian	3.7%	3.6%	3.8%	4.0%	3.8%	3.7%	3.5%	3.6%	3.7%	3.6%	3.0%	2.6%
Constr Industry	8.2%	7.2%	6.6%	7.0%	6.4%	5.5%	4.6%	5.9%	5.8%	4.4%	4.7%	3.8%
Constr Trades	8.2%	8.3%	7.1%	7.5%	7.4%	6.0%	5.4%	6.2%	6.2%	4.8%	5.0%	4.1%
Constr Laborers	11.7%	8.9%	8.2%	9.7%	9.5%	9.0%	8.6%	6.6%	8.8%	6.3%	6.8%	NA
Experiencing One or More Periods Unemployed and Looking for Work												
Total Civilian	12.6%	12.5%	11.3%	10.5%	9.9%	9.2%	8.5%	7.5%	7.0%	6.6%	8.2%	8.3%
Constr Industry	30.0%	28.8%	24.7%	21.7%	17.6%	18.7%	15.8%	13.4%	12.8%	11.8%	13.5%	13.4%
Constr Trades	31.8%	30.8%	25.5%	22.2%	19.5%	17.5%	15.4%	12.8%	12.7%	11.6%	12.7%	15.0%
Constr Laborers	37.2%	39.1%	36.3%	30.2%	25.1%	34.4%	24.8%	23.1%	18.9%	20.1%	22.2%	NA
Experiencing Two or More Periods Unemployed and Looking for Work												
Total Civilian	4.1%	4.1%	3.6%	3.3%	3.0%	2.8%	2.7%	2.3%	2.0%	1.9%	2.1%	2.0%
Constr Industry	14.4%	14.0%	11.9%	9.8%	7.4%	7.4%	7.0%	6.0%	5.5%	4.9%	5.4%	4.6%
Constr Trades	15.1%	14.7%	12.6%	10.7%	9.2%	7.9%	7.3%	6.2%	5.6%	5.2%	5.2%	5.0%
Constr Laborers	19.0%	19.5%	19.0%	12.2%	11.1%	13.4%	10.2%	10.8%	8.1%	8.4%	8.5%	NA
Employed 52 Weeks												
Total Civilian	69.8%	70.8%	71.8%	72.1%	73.2%	74.0%	75.0%	76.3%	76.6%	78.0%	77.1%	77.5%
Constr Industry	51.5%	53.4%	57.3%	59.7%	64.3%	65.0%	65.7%	69.7%	71.5%	73.8%	71.4%	72.9%
Constr Trades	50.1%	52.3%	55.9%	59.6%	61.1%	65.2%	66.1%	71.8%	72.3%	74.0%	72.2%	71.2%
Constr Laborers	36.6%	38.4%	41.8%	45.0%	51.9%	44.9%	48.0%	55.4%	55.4%	61.0%	59.1%	NA
Self-Employed												
Total Civilian	10.6%	10.8%	11.5%	11.3%	10.8%	11.0%	10.5%	10.2%	10.1%	9.9%	9.7%	10.3%
Constr Industry	21.8%	24.4%	25.9%	23.6%	23.2%	23.3%	23.4%	22.2%	22.5%	21.0%	19.9%	22.2%
Constr Trades	22.0%	24.3%	24.8%	23.5%	22.2%	23.0%	23.3%	22.2%	22.6%	21.9%	21.6%	18.7%
Constr Laborers	0.5%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	NA

Source: Current Population Survey, Annual (March) Demographic Supplement, tabulated by NAHB

Note: Data for Construction Trades for 2002 based on new category for "Construction and Extraction Occupations" and includes laborers. Labor Force data, self-employment, industry and occupation based on current or most recent job as of survey in March of following year.

industries. The Job Opening and Labor Turnover Survey, from which those numbers came, is fairly new, and it is not clear why the rate for construction is so much higher than the average.

Employment in the construction industry grew during the first eight months of 2003, so the average monthly rate of new hires exceeded the average separation rate, at 6.4 percent. The average new hire rate for all private industries was reported as 3.5 percent, slightly above the

corresponding separation rate, even though there was no growth in total private industry employment over that period, according to the broader establishment survey of payroll employment.

The increase in the stability of employment in the construction trades over the past decade may be partly due to the current high level of construction activity. A slump in construction could widen the gap between construction trades and other occupations. Construction

activity itself, however, may be less volatile in the future than in the past. And the ties of workers to employers may remain more continuous, even apart from the effects of fluctuations in activity.

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¹ See Elliot Eisenberg, Self-Employment in Construction, Housing Economics, January 2001.