

Compensation of residential and nonresidential construction workers

Beginning around 2001, employment in residential construction rose much faster than that in nonresidential construction, but the former then began a precipitous drop earlier than the latter; in addition, employee compensation has grown faster in recent years in nonresidential building construction than in residential building construction

Thomas Moehrle

For more than two decades, the Employer Cost for Employee Compensation (ECEC) publications available from the U.S. Bureau of Labor Statistics have reported estimates of the mean hourly costs for wages and benefits tabulated across industries, occupations, and labor force characteristics. The data for these estimates are drawn from the National Compensation Survey (NCS).¹ What makes ECEC statistics particularly useful for data users is the comprehensive detail of cost-level estimates for compensation components such as paid leave, health insurance, and contributions to retirement plans. Although the ECEC tabulations (published quarterly) currently serve a broad set of data users, the expansion over the last several years in the size of the NCS samples, along with enhancements in the industry classification system, have provided opportunities to examine—through the use of industry averages—industries that were once veiled from standard statistical analysis. This article presents compensation estimates for subsets of the construction sector, estimates that allow for an examination of recent trends in wages and benefits of workers employed in residential and nonresidential construction activities.

Standard ECEC publications provide data on compensation in the overall construction sector, but a more detailed analysis of subsectors, industry groups, and industries shows that compensation patterns for the construction sector as a whole mask important differences within the sector. The industry analysis in this article shows that workers in nonresidential construction typically earn more than workers in residential construction in the same subsector and that, for the construction of buildings subsector, the differential grew from 2004 to 2009.

Classification in the construction sector

As all other BLS establishment surveys do, the NCS classifies surveyed establishments according to the North American Industry Classification System (NAICS)—the industry classification standard adopted by the United States, Canada, and Mexico—which classifies establishments into sectors. Every sector has a two-digit code. Within each sector, establishments are further grouped into subsectors (three digits), industry groups (four digits), and industries (five digits). Through the first five digits, NAICS codes are comparable across the United States, Canada, and Mexico. A sixth digit is used for further detail within any of the three countries.² Three subsectors are

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defined for construction: construction of buildings (NAICS 236), heavy and civil engineering construction (NAICS 237), and specialty trade contractors (NAICS 238). Heavy and civil engineering construction entails projects such as highway and dam construction, which at best indirectly relate to residential and nonresidential construction projects. Because this study focuses on residential and nonresidential construction workers, establishments classified under heavy and civil engineering construction are excluded. To further refine the analysis, only establishments within the private sector are studied. Table 1 displays some of the NAICS codes in the construction sector.

The establishments classified under construction of buildings are involved principally in the construction of residential and commercial buildings, or the remodeling and maintenance of existing buildings. Many of these establishments are general contractors, operative builders, or remodelers who may contract part or all of the production work of a given construction project. Construction of buildings is divided into two industry groups: residential building construction (NAICS 2361) and nonresidential building construction (NAICS 2362). This grouping conveniently facilitates comparisons within the subsector. Although NAICS has been officially used in the United States only since 1997, its predecessor—the Standard Industry Classification (SIC) system—organized the categories within construction of buildings in much the same way; the close similarities provide the continuity necessary to construct, at least in part, a historical economic per-

spective of residential and nonresidential trends.³ The perspective is incomplete, however, because the construction of buildings subsector covers less than 25 percent of total construction employment.

Approximately 63 percent of all construction jobs are located in the specialty trade contractors subsector. Unlike the industry groups and industries within construction of buildings, those within the subsector of specialty trade contractors are defined by the types of production tasks carried out—such as carpentry, framing, electrical work, and plumbing—and not by whether activities are residential or nonresidential. Although the standard NAICS design does not distinguish residential construction from nonresidential construction in the specialty trade contractors subsector, BLS has used the last digit of the NAICS code to distinguish between these two activities.⁴ The NAICS codes that BLS has added appear under the specialty trade contractor subsector in table 1.⁵

To gather a sense of the relative importance of residential and nonresidential activities, the article discusses employment trends for residential and nonresidential construction in the subsectors of specialty trade contractors and construction of buildings before turning to compensation patterns. The employment data in the article come from the Current Employment Statistics (CES) program at BLS. These data are not seasonally adjusted.

Employment trends

Chart 1 shows employment trends in construction of buildings, and chart 2 shows employment trends for specialty trade contractors.⁶ Because of the continuity of building construction data from SIC to NAICS, the charted data for that subsector stretch back to 1990, whereas the specialty trade contractors series is mapped back only to 2001. The data in the charts reveal that, although the two subsectors have very different employment levels, the patterns from 2001 and later are directionally similar. Residential construction employment in both subsectors increased with the residential housing boom in the early years of the decade until it began to contract in 2006, whereas nonresidential employment in both subsectors fell as the effects of the 2001 recession rippled through the economy and then climbed until 2008 when employment levels throughout the economy again began to contract.

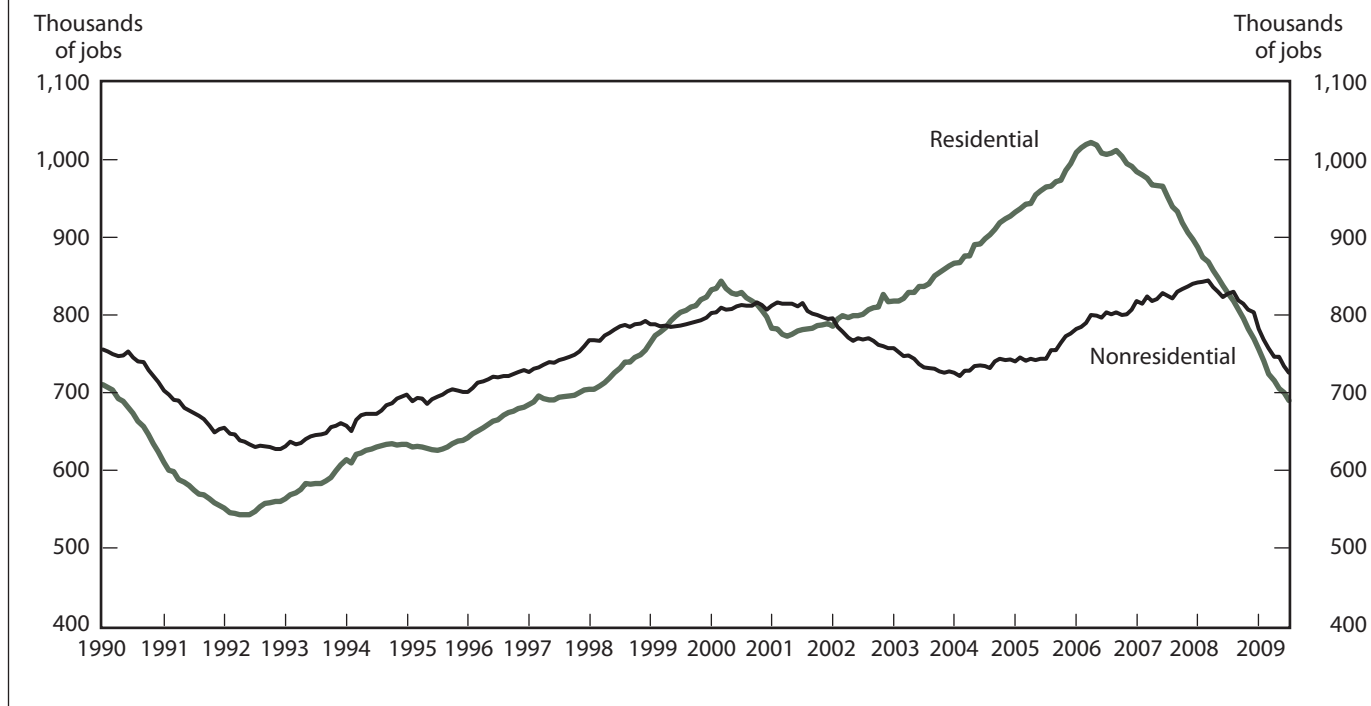
Employment trends in construction of buildings. In a 2006 Monthly Labor Review article,⁷ John Mullins studied trends in residential and nonresidential construction employment. Using the building construction data series, Mullins reported that until the end of the 1990s employment trends of residential establishments and nonresidential establishments

Table 1. BLS NAICS code summary for the construction sector, March 2009

Title	Classification	NAICS code	Percent of employment ¹
Construction	Sector	23	100.0
Construction of buildings	Subsector ...	236	22.9
Residential building construction	Industry group	2361	10.7
Nonresidential building construction	Industry group	2362	12.2
Heavy and civil engineering	Subsector ...	237	13.6
Specialty trade contractors	Subsector ...	238	63.5
Residential specialty trade contractors	Industry (BLS)	238001	26.7
Nonresidential specialty trade contractors	Industry (BLS)	238002	36.8

¹ The data used to calculate the estimates in this column are not seasonally adjusted.

Chart 1. Employment in residential and nonresidential construction of buildings, private industry, seasonally adjusted, January 1990–July 2009



followed similar paths, although the latter had a larger share of employment. Establishments in both industries shed large numbers of people from payrolls in the first few years of the 1990s and then experienced relatively steady employment growth through the remaining years of that decade. (See chart 1.)

Although the patterns of residential and nonresidential construction were similar through the 1990s, there are notable differences, most notably that employment in residential construction dropped more sharply in the early years and grew more rapidly in the later years. The quicker paced job growth pushed the level of residential employment past that of nonresidential employment during 1999.

The similarities that had appeared in the 1990s dissipated by the new century. With the exception of a moderate decline from March 2000 to April 2001, establishments in residential building construction continued to add workers to payrolls—at an unprecedented rate—until the early part of 2006. Notably, the short and shallow recession of 2001 that stretched from March to November of that year appears not to have had any long-term ill effects on employment in residential building construction. The same cannot be said of nonresidential construction, however.

After adding jobs from 1993 through 1999, establishments in nonresidential building construction curtailed job creation as employment flattened in 2000 before precipitously falling through most of the period from 2001 through 2003. The divergent trends of the two industry groups resulted in an unparalleled widening of employment levels: residential construction employment grew by more than 10 percent between 2001 and 2004, and nonresidential construction employment decreased by more than 10 percent during that same period. When residential employment peaked in early 2006, it exceeded nonresidential employment by 223,000, a marked difference from what had occurred in the 1990s.

Mullins links this sudden divergence in employment paths to a confluence of events. He points out that the nonresidential construction industry was clearly affected by the recession of 2001—which was characterized by businesses cutting back on investment spending, while the residential side of the market shrugged off any recessionary drag. In fact, the residential housing market actually accelerated during the same period, as several socioeconomic factors—including historically low interest rates—came together. Among the factors Mullins cites are the growth in baby boomers' demand for second homes and their children's desire to purchase their first homes.

Since Mullins' 2006 article, employment in residential building construction has plummeted by nearly a third, falling from its April 2006 peak of 1.0 million to under 690,000 in July 2009. Employment in nonresidential establishments also has fallen, but not as steeply. Non-residential employment peaked at 844,000 in March 2008 before falling and eventually hitting 726,000 in July 2009, a 14-percent decline. To date, it appears that both industry groups continue the downward trend.

Employment trends in the specialty trade contractors subsector. The specialty trade contractors subsector has exhibited patterns remarkably similar to those of the construction of buildings subsector. Together, charts 1 and 2 show that employment in residential construction experienced nearly the same periods of growth and contraction in the two subsectors, as did employment in nonresidential construction. What is clearly different between the two subsectors is the level of employment: as of July 2009, employment in specialty trade contractors was 2.8 times larger than employment in building construction, making the former the predominant subsector of construction.

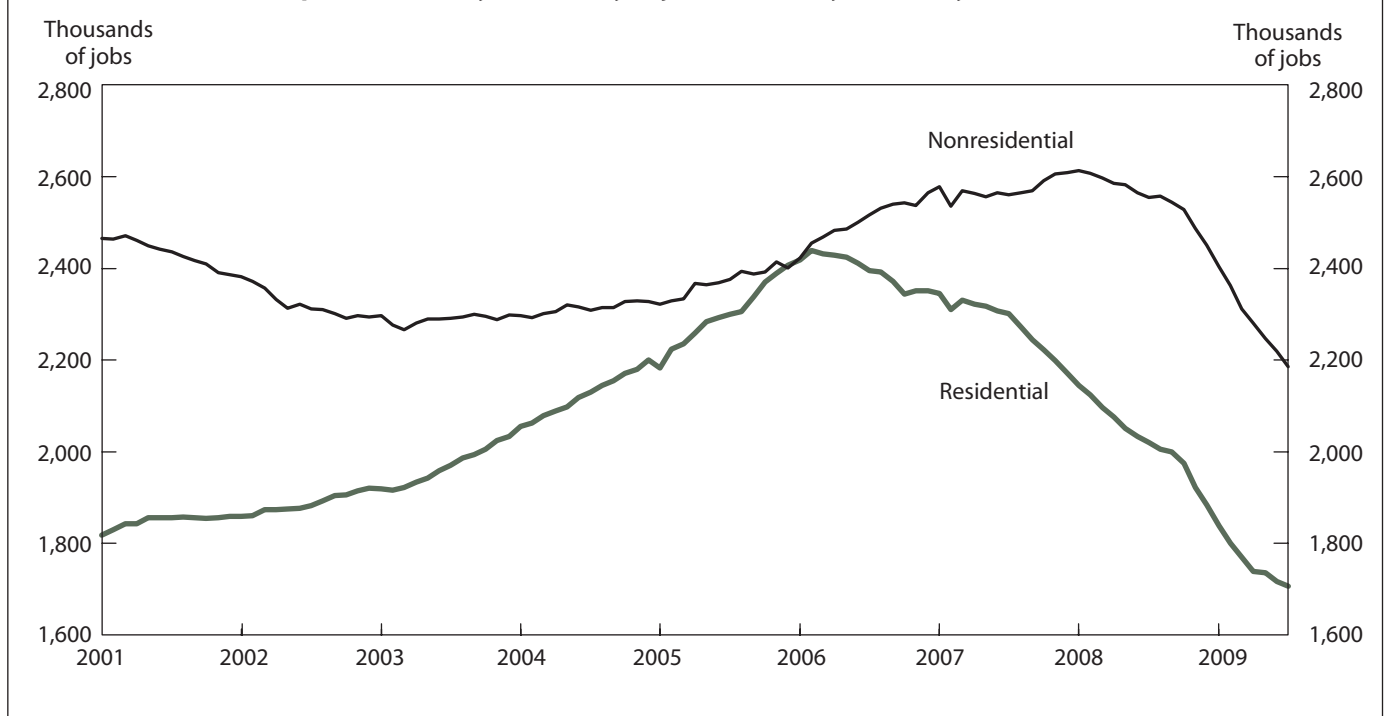
In specialty trade, nonresidential employment exceeded residential employment by nearly 650,000 in January 2001 (2.5 million compared with 1.8 million), but the extraordinary growth in residential employment brought

the two employment levels together by early 2006, the period in which residential employment in the subsector peaked. Residential employment in the subsector grew by about 34 percent during the 5-year period to peak at over 2.4 million.

Similar to what happened in building construction, employment in nonresidential establishments of specialty trade contractors fell with the 2001 recession to a low of 2.3 million before expanding from March 2003 to January 2008, when it peaked at 2.6 million. Both industries have shed jobs since their peaks. According to CES estimates, residential employment fell by 30 percent from its peak to 1.7 million as of July 2009, and nonresidential employment fell 16 percent from its peak to 2.2 million as of July 2009. In percentage terms, the comparable industries in both subsectors experienced very similar employment declines from their respective peaks.

Certainly, trends in employment can have effects on compensation levels. To capture these effects within particular industries, ECEC cost-level estimates are calculated through the use of sample weights calibrated to the level of industry employment at the time of the survey. For this study, sample weights are calibrated to account for changes in employment among the construction subsectors—inclusive of shifts among the residential and nonresidential industries—by use of employment data from the CES

Chart 2. Employment among specialty trade contractors involved in residential and nonresidential construction, private industry, seasonally adjusted, January 2001–July 2009



program. When sample weights are adjusted to mirror employment trends at the time of the survey, aggregated compensation data—such as estimates for all residential workers or all nonresidential workers—will move more in accordance with employment. The next section of the article discusses these compensation estimates.

Compensation patterns

In March 2004, the NCS program made a major transition regarding how ECEC compensation data are tabulated and published by industry and occupation. A switch was made from publishing industry estimates under the SIC system to publishing them under NAICS. The classification of occupations also was changed, from the occupational classification system of the 1990 Census of the Population to the 2000 Standard Occupational Classification (SOC) system.⁸ As an extension of the ECEC tabulations by industry, table 2 presents estimates of employer costs for employee compensation by residential and nonresidential construction activities for the construction of buildings subsector, and table 3 does the same for the specialty trade contractors subsector.⁹

Although ECEC publications provide estimates for March, June, September, and December of each year, the tables presented in this article contain only March estimates but span the years from 2004 through 2009, the only years for which ECEC estimates are available under NAICS.¹⁰ Tables A-1 and A-2 of the appendix provide the relevant relative standard errors, which measure the statistical reliability of these estimates.

The estimates reveal interesting differences in compensation structure between residential and nonresidential construction. For most of the years reported in tables 2 and 3, residential workers earned less in total compensation than nonresidential workers. Tables A-3 and A-4 of the appendix present differences in hourly compensation—by component of compensation—along with the *t*-statistics of each of these differences. The *t*-statistics presented in the tables gauge the statistical significance of the estimated differences in compensation. When one is interpreting the statistical significance of a difference presented in this article, a *t*-statistic greater than 1.65 is associated with statistical significance at the 90-percent level of confidence. Most differences for total compensation, wages and salaries, and total benefits are statistically significant, particularly for the years from 2006 forward. All compensation figures in this article are nominal.

Compensation patterns in construction of buildings. The

differentials in compensation between residential and nonresidential workers within building construction are somewhat varied. In March 2004, residential workers earned a mean of \$26.61 per hour in total compensation while nonresidential workers earned a mean of \$30.84 per hour in total compensation (table 2), 16 percent more than residential workers. By March 2009, nonresidential construction work paid, on average, 51 percent more in total compensation than residential construction work: total compensation of residential workers was virtually unchanged through the 6-year period while total compensation of nonresidential workers increased to \$41.12, a remarkable occurrence given the employment trends of the two industries. Arguably, nominal compensation could be expected to remain relatively flat for residential workers in light of the contraction in employment by a third from April 2006 to July 2009, but the weakening demand for nonresidential workers—evidenced by the 14-percent contraction in that industry group's employment—has not prevented the compensation levels of those workers from rising. This suggests that the two labor markets—that of residential construction and that of nonresidential construction—are different and should be analyzed separately as well as together.

As did the gap in total compensation, the wage and salary gap widened between 2004 and 2009. In March 2004, the mean of the wages and salaries paid to nonresidential workers was \$22.09 per hour, which was not significantly different from residential workers' mean wage, \$19.59. But by March 2009, nonresidential workers' average wages had grown to \$28.06 and residential wages averaged \$20.23—virtually unchanged from 2004. In addition, the estimated difference in wage and salary between residential and nonresidential building construction workers is statistically significant for each of the years from 2006 forward, suggesting fundamental differences in compensation structures emerging over the last few years.¹¹ Not only are the differences for the later years statistically significant, they are also economically significant. Because the wages paid to residential workers remained virtually flat, real wages—that is, wages adjusted for changes in the Consumer Price Index—fell in residential building construction as the Consumer Price Index increased 13.5 percent between March 2004 and March 2009. Nonresidential workers' wages stayed well ahead of price increases, rising a nominal 27 percent.

Not surprisingly, the wage differences are mirrored in the benefits component of compensation. Employers' costs for the benefits of residential building construction workers were virtually unchanged between 2004 (\$7.02

Table 2. Mean employer costs for employee compensation per hour worked and costs as a percent of total compensation in the construction of buildings subsector (NAICS 236), private industry, March data, 2004–09

Item	March 2004		March 2005		March 2006		
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands) ¹	844.4	703.3	911.3	716.3	987.1	763.4	
Costs per hour worked							
Total compensation	\$26.61	\$30.84	\$28.06	\$32.22	\$26.80	\$34.83	
Wages and salaries	19.59	22.09	19.72	22.90	19.28	23.91	
Total benefits	7.02	8.74	8.34	9.33	7.52	10.92	
Paid leave .....	.98	1.37	1.00	1.45	.97	1.60
Supplemental pay .....	.95	.85	1.61	1.00	1.41	1.28
Insurance	1.19	1.81	1.57	1.97	1.46	2.54	
Health	1.15	1.70	1.52	1.86	1.41	2.39	
Retirement and savings .....	.73	1.32	.78	1.48	0.60	1.77
Legally required ²	3.18	3.39	3.38	3.41	3.07	3.73	
Percent of total compensation							
Total compensation	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries	73.6	71.6	70.3	71.1	71.9	68.6	
Total benefits	26.4	28.4	29.7	28.9	28.1	31.4	
Paid leave	3.7	4.4	3.6	4.5	3.6	4.6	
Supplemental pay	3.6	2.8	5.7	3.1	5.3	3.7	
Insurance	4.5	5.9	5.6	6.1	5.4	7.3	
Health	4.3	5.5	5.4	5.8	5.3	6.9	
Retirement and savings	2.7	4.3	2.8	4.6	2.2	5.1	
Legally required ²	11.9	11.0	12.1	10.6	11.5	10.7	
		March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands)	942.1	797.4	832.9	817.8	638.0	725.9	
Costs per hour worked							
Total compensation	\$26.69	\$35.65	\$26.25	\$38.32	\$27.18	\$41.12	
Wages and salaries	19.64	24.15	19.81	26.15	20.23	28.06	
Total benefits	7.06	11.50	6.44	12.17	6.94	13.06	
Paid leave .....	.98	1.50	.91	1.59	1.06	1.87
Supplemental pay	1.47	1.32	1.09	1.23	1.13	1.19	
Insurance	1.25	2.79	1.10	2.90	1.28	3.15	
Health	1.21	2.62	1.06	2.71	1.23	2.96	
Retirement and savings .....	.39	2.06	.38	2.34	.41	2.43
Legally required ²	2.97	3.83	2.97	4.11	3.07	4.42	
Percent of total compensation							
Total compensation	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries	73.6	67.7	75.5	68.2	74.5	68.2	
Total benefits	26.4	32.3	24.5	31.8	25.5	31.8	
Paid leave	3.7	4.2	3.5	4.2	3.9	4.5	
Supplemental pay	5.5	3.7	4.1	3.2	4.2	2.9	
Insurance	4.7	7.8	4.2	7.6	4.7	7.7	
Health	4.5	7.3	4.0	7.1	4.5	7.2	
Retirement and savings	1.5	5.8	1.4	6.1	1.5	5.9	
Legally required ²	11.1	10.8	11.3	10.7	11.3	10.8	

¹ The data in this row are not seasonally adjusted.

² Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

Table 3. Mean employer costs for employee compensation per hour worked and costs as a percent of total compensation in the specialty trade contractors subsector (NAICS 238), private industry, March data, 2004–09

Item	March 2004		March 2005		March 2006		
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands) ¹	1,987.8	2,197.7	2,136.7	2,231.9	2,322.6	2,365.4	
Costs per hour worked							
Total compensation	\$21.01	\$29.96	\$21.72	\$30.20	\$22.68	\$30.97	
Wages and salaries	15.58	20.34	15.90	20.46	16.58	20.77	
Total benefits	5.43	9.62	5.83	9.74	6.10	10.20	
Paid leave .....	.55	1.06	.59	1.01	.66	1.20
Supplemental pay .....	.64	.87	.65	.80	.61	.95
Insurance .....	.99	2.31	1.09	2.41	1.34	2.58
Health .....	.94	2.25	1.04	2.33	1.28	2.46
Retirement and savings .....	.47	1.99	0.56	2.07	.66	1.98
Legally required ²	2.78	3.37	2.94	3.44	2.83	3.49	
Percent of total compensation							
Total compensation	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries	74.2	67.9	73.2	67.7	73.1	67.1	
Total benefits	25.8	32.1	26.8	32.3	26.9	32.9	
Paid leave	2.6	3.5	2.7	3.3	2.9	3.9	
Supplemental pay	3.1	2.9	3.0	2.6	2.7	3.1	
Insurance	4.7	7.7	5.0	8.0	5.9	8.3	
Health	4.5	7.5	4.8	7.7	5.6	7.9	
Retirement and savings	2.2	6.7	2.6	6.9	2.9	6.4	
Legally required ²	13.2	11.3	13.5	11.4	12.5	11.3	
		March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential	
Employment (in thousands)	2,222.1	2,465.3	1,995.3	2,491.6	1,588.3	2,190.1	
Costs per hour worked							
Total compensation	\$23.16	\$30.76	\$23.84	\$32.37	\$25.21	\$33.99	
Wages and salaries	17.01	20.92	17.67	21.86	18.67	22.83	
Total benefits	6.15	9.84	6.17	10.51	6.54	11.15	
Paid leave .....	.65	1.21	.66	1.26	.77	1.25
Supplemental pay .....	.64	.95	.67	1.01	.63	1.04
Insurance	1.27	2.54	1.32	2.72	1.36	3.00	
Health	1.21	2.40	1.25	2.56	1.29	2.84	
Retirement and savings .....	.60	1.78	.58	2.07	.69	2.29
Legally required ²	2.99	3.36	2.93	3.44	3.09	3.57	
Percent of total compensation							
Total compensation	100.0	100.0	100.0	100.0	100.0	100.0	
Wages and salaries	73.4	68.0	74.1	67.5	74.1	67.2	
Total benefits	26.6	32.0	25.9	32.5	25.9	32.8	
Paid leave	2.8	3.9	2.8	3.9	3.0	3.7	
Supplemental pay	2.8	3.1	2.8	3.1	2.5	3.1	
Insurance	5.5	8.2	5.6	8.4	5.4	8.8	
Health	5.2	7.8	5.3	7.9	5.1	8.4	
Retirement and savings	2.6	5.8	2.4	6.4	2.7	6.7	
Legally required ²	12.9	10.9	12.3	10.6	12.3	10.5	

¹ The data in this row are not seasonally adjusted.

² Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

per hour) and 2009 (\$6.94 per hour). During that same period, the nonresidential side of the subsector reported benefit costs of \$8.74 in 2004 and \$13.06 in 2009. Using 2004 as a base and comparing that year with 2009 reveals that the benefit gap expanded from 24.5 percent in 2004 to 88.2 percent in 2009. Part of the divergence in benefit costs resulted from the difference in wage growth. For many workers, the majority of benefit costs are formulaically related to wage levels. For instance, as wages increase, so do the costs of Medicare and Social Security contributions, paid leave, and some supplemental components of compensation such as premium pay for overtime. With wage growth so different between residential and nonresidential building construction workers, a wedge between benefit costs can be expected to emerge naturally. But this is only part of the story. Much of the expansion of the gap in benefit costs can be traced directly to the cost of health insurance and that of retirement and savings, two benefits that are only weakly related to wage levels.

As frequently reported in the news media, health insurance costs have increased substantially over the years. Measured across all private industry workers, Employment Cost Index estimates indicate that employers' costs for health insurance have increased about 30 percent since 2004.¹² However, according to the ECEC estimates of this study, employers' costs for health insurance have remained virtually unchanged for residential workers in building construction, but have increased 74 percent for nonresidential workers in the same subsector. In 2009, employers' health insurance costs were \$1.23 per hour for residential workers and \$2.96 per hour for nonresidential workers. The mean for all private industry workers was \$2.00 in March 2009.

The cause of the large differences in health insurance costs as measured by ECEC can only be speculated upon. Naturally, more generous health insurance plans drive up costs, as does an increase in the rate of participation in health benefits. However, offsetting these factors are new requirements for some employees who participate in employer provided health plans, requirements such as dollar contributions to accompany employers' contributions. Whether the quality of health-care coverage is better and whether worker participation is higher among nonresidential workers are questions that cannot be answered definitively with ECEC data alone.¹³ Nevertheless, with such a large difference in health insurance costs paid by employers, it seems clear that, overall, nonresidential building construction workers have fared better than their counterparts over the last few years in regard to health benefits.

The gap between residential and nonresidential building construction widened even further for retirement and saving benefits. Between 2004 and 2009, retirement contribution costs decreased by 43 percent for employers in residential building construction whereas they increased 85 percent for employers in nonresidential building construction. Retirement and savings costs include both the costs of defined benefit plans and those of defined contribution plans. In March 2009, retirement costs were \$0.41 for residential building construction and \$2.43 for nonresidential building construction.¹⁴ The average for all of private industry was \$0.96.

Compensation patterns for specialty trade contractors. The gap in total compensation is large and significant in the specialty trade contractors subsector as well, but that differential has been comparatively more stable over the years than that of building construction. In March 2004 in the specialty trade contractors subsector, the mean total compensation of nonresidential construction workers was \$8.94 greater than that of residential construction workers; in March 2009 the difference was \$8.78.¹⁵ The differences are statistically significant for March of every year from 2004 to 2009. The relatively stable difference in compensation from 2004 to 2009 reflects, in part, similar growth in compensation for the two sets of workers (residential and nonresidential), which stands in contrast to what occurred in building construction. Although the overall gap in compensation between residential workers and nonresidential workers in the two relevant subsectors of construction confirms differences between the markets for residential and nonresidential construction labor, the difference in growth in compensation between residential workers in construction of buildings and those working for specialty trade contractors suggests differences between these two groups of workers as well. The difference in growth in compensation between residential and nonresidential workers in specialty trade appears not to have been affected by the subsector's changing gap in employment, whereas the difference in compensation between residential and nonresidential building construction workers does appear to have been affected by that subsector's changing employment gap.

In the specialty trade contractors subsector, the gap in cost between residential and nonresidential workers is divided nearly equally (in dollar terms) between wages and salaries and total benefits. In March 2009, nonresidential workers were paid mean hourly wages of \$22.83 (table 3), \$4.17 more than residential workers, and received benefits costing an average of \$11.15, \$4.61 more than their counterparts.

Factors influencing differences in compensation

Differences in compensation between comparable industries can come about from any number of factors. For instance, within a given occupation, it could be the case that nonresidential establishments employ a larger proportion of higher skilled workers than residential establishments. Moreover, the occupational distributions of residential and nonresidential construction work may be very different; for example, it could be that nonresidential establishments employ a greater proportion of people in higher wage occupations—such as managers or engineers—thereby pulling up the average compensation of the industry. And, of course, industry and occupational mix may vary by area of the country, and compensation levels can fluctuate significantly by area of the country.

Regression analysis. Because of the small size of the ECEC subsample of the NCS, for this article's calculations of average compensation by industry, no attempt is made to control for occupational staffing differences among establishments and industries.

However, regression analysis provides a means by which occupational, geographic, and other differences among industries can be statistically controlled while one measures differences in compensation among industries. To model the difference in compensation between the two industries in question, the ECEC microdata were used in a log-linear regression model of compensation levels. The compensation differential of the two industries within each of the two subsectors was isolated by controlling for the occupational mix, the geographical area, and selected occupational characteristics, which were unionization, establishment size, and the number of hours scheduled for work.¹⁶ The regression results show a difference in total compensation between residential and nonresidential construction in the range of 5 percent to 11 percent, a range that is much smaller than the ranges between the industry averages presented in tables 2 and 3; this smaller range suggests that differences in compensation structure between the two sets of workers are not as large as the simple sample-weighted industry averages suggest, but the results of the model do confirm a significant difference in compensation.¹⁷

OES data. When one controls for occupational distribution and other factors associated with compensation, the ECEC sample cannot support simple sample-weighted industry averages that are statistically reliable (because

of the small sample size); however, the Occupational Employment Statistics (OES) program's sample can do so in part. The OES program conducts a large area-based national wage survey for which it canvasses all areas of the country. The national sample consists of 1.2 million establishments from which information is collected over 3 consecutive years. Because of the sample size of the OES survey, wage estimates often can be constructed for the most detailed level of occupations within given industries, and thus users of OES survey data can sometimes compare the average wage of an occupation within a given subsector, industry group, or industry with the same occupation's average wage in a different subsector, industry group, or industry.¹⁸

The OES program reports residential and nonresidential construction data for only the construction of buildings subsector, but that set of estimates is sufficient to demonstrate that gaps in compensation between residential and nonresidential construction remain across individual occupations. For May 2008, OES reported on 19 major occupational groups within construction of buildings. Not surprisingly, the largest major occupational group in terms of employment was construction and extraction, which accounted for nearly 64 percent of employment in the construction of buildings subsector. For construction and extraction, wages were notably different between residential and nonresidential construction. Workers within residential construction earned an average wage of \$19.36 per hour while nonresidential workers earned \$22.24 on average, a 15-percent difference. In fact, for the May 2008 results, all but two of the major occupational groups that were compared showed nonresidential workers earning more on an hourly basis than their counterparts.¹⁹

Still, because major occupational groups are composites of many individual occupations, an analysis of residential and nonresidential construction activity within the groups will of course tell a different story than an analysis of the two industries within individual occupations. Since the major group construction and extraction accounts for the largest percent of employment in the construction sector, it is illustrative to compare detailed occupations within this group. OES data show that carpenters make up the largest percentage of employment within this major group, with 47.8 percent of their employment within the residential industry and 30.6 percent of it within the nonresidential industry. Even within this narrowly defined occupation, wages are notably higher for nonresidential workers. Carpenters in residential construction earned, on average, \$19.71 per hour in wages in May 2008, while those in nonresidential construction earned \$22.95, a

16-percent difference.²⁰

Establishment and occupational characteristics

Differences in characteristics of workers, of establishments, and so forth are of interest to many ECEC data users because there are typically correlations between some of the characteristics and compensation levels.²¹ Because of the small size of the ECEC sample, employer cost data that are tabulated by any of the characteristics, such as union membership or establishment size, cannot be precisely estimated for the two industries of residential and nonresidential construction, so they are not provided in this study.²² However, the percentage distributions of these characteristics provide insight into differences among the four sets of workers (residential and nonresidential workers in construction of buildings and at specialty trade contractors) that may result in disparities in compensation. Table 4 shows, for March 2004 and March 2009, the percentage of workers in unions and the percentage with a full-time work schedule, as well as the distribution of workers among four establishment size classes.²³

Typically, unionization is correlated with higher levels of compensation, and the compensation estimates in this study are consistent with that correlation.²⁴ The table shows that in March 2009 nonresidential workers—in both subsectors—had higher incidences of unionization than residential workers. Within building construction, less than 3 percent of residential workers were union members, while nearly 23 percent of nonresidential workers were members. For specialty trade, nearly 10 percent of residential workers were members of unions, whereas 35 percent of nonresidential workers were members. According to data from the Current Population Survey, union membership for the United States was 12.4 percent in 2008.²⁵

The distribution of workers according to size of es-

tablishment also is revealing. Most construction jobs are found within establishments employing fewer than 100 workers. In March 2009, around 90 percent of workers in residential construction—in both subsectors—worked in establishments with fewer than 100 workers, and approximately 90 percent of these workers (in both subsectors) were employed in establishments with fewer than 50 workers. Less than 2 percent of residential workers were employed in establishments employing 500 or more workers. The distribution of nonresidential workers according to size of establishment is less skewed. In March 2009, about two-thirds of nonresidential construction workers employed in construction of buildings worked at establishments having fewer than 100 workers, and nearly 11 percent of nonresidential building construction workers worked at establishments having 500 or more workers. About 75 percent of specialty-trade nonresidential workers were employed within establishments having fewer than 100 workers; 3 percent were employed at establishments having 500 or more workers. Without regard to the full set of factors influencing levels of compensation, workers in large establishments tend to earn higher wages and salaries and typically have more generous benefit packages.

COMPENSATION OF CONSTRUCTION WORKERS varies greatly. Estimates derived from the March 2009 NCS survey data show that, in the construction of buildings subsector, the average total compensation of nonresidential workers was 51 percent higher than that of residential workers, and the differences in employer costs were large for both wages and benefits. A smaller gap is present in the specialty trade contractors subsector, in which nonresidential workers earn nearly 35 percent more in total compensation than residential workers. These differences stem from numerous factors, including occupational mix, geographical area, and many occupational characteristics.

Table 4. Percentages for selected characteristics, construction of buildings (NAICS 236) and specialty trade contractors (NAICS 238), private industry, March 2004 and March 2009

Subsector, industry group, or industry	Union		Full time		Establishment size classes (number of workers)							
					1-49		50-99		100-499		500 or more	
	2004	2009	2004	2009	2004	2009	2004	2009	2004	2009	2004	2009
Construction of buildings												
Residential	7.1	2.6	93.6	88.3	88.3	81.6	5.3	8.2	6.4	9.2	.0	1.0
Nonresidential	17.4	22.5	99.5	95.7	56.9	43.1	10.1	23.0	25.3	23.2	7.7	10.7
Specialty trade contractors												
Residential	9.2	9.4	97.4	93.2	76.7	83.0	11.6	8.7	9.8	6.8	1.9	1.5
Nonresidential	33.9	35.0	97.7	97.6	53.5	53.2	14.6	22.1	27.6	21.5	4.2	3.2

For building construction workers, the gap in total compensation between residential and nonresidential workers has widened greatly since 2004, when nonresidential workers received 16 percent more in total compensation. The widening of the gap occurred as nonresidential workers saw hefty increases in compensation while residential workers had virtually unchanged compensation across the 6-year period. Among nonresidential building construction workers, total benefits were up 49 percent from March 2004 to March 2009, increasing substantially faster than wages, which rose by 27 percent. Most

of the group's increases in benefits were driven by growth in the amounts employers paid for health insurance (74 percent) and retirement and savings (85 percent) benefits. For specialty trade contractors, the gap in total compensation has been more stable, undulating only slightly across the 6-year period. In March 2004, total compensation in nonresidential construction was about 43 percent more than that in residential construction. For March 2009, the gap is estimated at about 35 percent. The relative stability in the gap in compensation is attributable to increases in compensation that were only slightly different. □

Notes

¹ For more on the National Compensation Survey and its products, visit www.bls.gov/ncs (visited Mar. 22, 2010).

² For a more thorough description of NAICS, see www.census.gov/eos/www/naics/ (visited Mar. 22, 2010), and for a list of NAICS codes and their titles, see www.census.gov/naics/2007/NAICOD07.HTM#N23 (visited Mar. 22, 2010).

³ To capture changes in the economy, NAICS codes are revised every 5 years. For construction, a major revision occurred in 2002, but no revisions to the sector were made for 2007. For the tabulations presented in this paper, NAICS codes for construction follow the 2002 and 2007 code structure.

⁴ When an establishment is involved in both residential and nonresidential construction projects, BLS assigns the establishment to the type of construction (residential or nonresidential) that generates the most revenue.

⁵ For more on the development of the residential and nonresidential construction industries in the specialty trade contractors subsector, see Christopher Manning and John P. Mullins, "Two new construction employment series for specialty trade contractors," *Monthly Labor Review*, October 2006, pp. 14–22, on the Internet at www.bls.gov/opub/mlr/2006/10/art2full.pdf (visited Mar. 22, 2010).

⁶ The numerical data represented in these charts are available from the BLS Web site at www.bls.gov/ces/tables.htm#ec (visited Mar. 22, 2010). Many of these data are revised periodically, and the Web site will reflect the most recent revisions to the data.

⁷ The October 2006 edition of the *Monthly Labor Review* featured three articles on employment in the construction industry: John P. Mullins, "Recent employment trends in residential and nonresidential construction," *Monthly Labor Review*, October 2006, pp. 3–13; Manning and Mullins, "Two new construction employment series for specialty trade contractors"; and Matthew Miller, "A visual essay: post-recessionary employment growth related to the housing market," *Monthly Labor Review*, October 2006, pp. 23–34.

⁸ SOC is the occupational coding standard for all Federal statistical agencies. See www.bls.gov/soc (visited Mar. 31, 2010).

⁹ Although averages for all residential construction workers and for all nonresidential workers (cross-subsector) are not presented in the tables, they can be calculated by use of the employment counts provided in each column of tables 2 and 3.

¹⁰ The Employment Cost Index and ECEC surveys have only recently been merged into the NCS. In order to reduce the cost of the surveys, both the older Employment Cost Index and ECEC surveys and the current NCS have operated under a rotating sampling design by which approximately 20 percent of private industry

establishments are replaced each year. Under this design, several years can pass before published survey results reflect changes that were made to the survey. The adoption of NAICS is one of those survey changes which have taken several years to implement. For more on NCS survey design, see chapter 8 of the *BLS Handbook of Methods* at www.bls.gov/opub/hom/home.htm (visited Mar. 31, 2010).

¹¹ ECEC estimates show the average compensation employers pay workers; because the employment data that go into the calculation are the employment levels at the time of the survey, changes in factors such as distribution of employment among lower and higher paying jobs from one survey period to the next can affect average compensation figures even if the pay scales of the sampled occupations have not changed.

¹² See *Employment Cost Index—Supplemental Data: Health insurance, private industry, 12-month percent change in employer costs per hour worked* (Bureau of Labor Statistics, Jan. 29, 2010), on the Internet at www.bls.gov/ncs/ect/sp/ehealth.pdf (visited Mar. 31, 2010).

¹³ The NCS program publishes estimates on the percent of employees required to share in the costs of medical plan premiums and on employees' average contributions (in dollars). For more on these benefit statistics, see www.bls.gov/ncs/ncspubs.htm (visited Mar. 31, 2010). The NCS program has not tabulated estimates for the detailed construction industries examined in this paper, however.

¹⁴ Caution should be exercised when interpreting cost levels for individual benefits such as retirement and savings, because the relative standard errors are high. Relative standard error (RSE) is the sampling error of an estimate as a percent of that estimate. For most ECEC published series of benefit costs, RSEs range from 1 percent to 50 percent. The RSEs of the retirement and savings estimates for the industries in this study range from 17.8 percent to 35.5 percent. Typically, an RSE is inversely related to the size of the sample in question.

¹⁵ These cost differences are calculated with unrounded industry averages. See tables A-3 and A-4 of the appendix for cost differences.

¹⁶ Occupational mix was modeled by assigning an indicator variable to each of the six-digit SOC occupations present in the microdata. Geographical area and occupational characteristic variables were modeled in a similar way—by constructing indicator variables for each. Establishment size was modeled as the logarithm of reported establishment employment. The variable of interest, industry, also was modeled as an indicator variable.

¹⁷ Each occupation that is selected during the NCS collection process is evaluated and slotted into 1 of 15 "work levels," which follow the Federal Government's General Schedule. For NCS purposes, multiple levels of the same occupation—accountants, for example—are considered as separate occupations. This occupational leveling process allows one to rank and compare all occupations that are randomly selected in

an establishment using the same criteria throughout. For information on the NCS occupational leveling process, see www.bls.gov/ncs/ocs/sp/ncbr0004.pdf (visited Apr. 5, 2010.) With the merger of the ECI/ECEC sample into the broader NCS wage sample, occupational leveling information is now collected for all sampled occupations. Leveling information show—among other characteristics—the knowledge and skill levels of workers within particular occupations. Leveling information may prove important for understanding differences between residential and nonresidential construction. Work continues in this area, and for this reason a complete analysis of the regression model is not presented in this article.

¹⁸ Level of skill and other characteristics, however, are not controlled for when an occupation’s wage in one industry is compared with its wage in another industry, and, consequently, these characteristics can influence the difference in average wage that is calculated.

¹⁹ The two major occupational groups reporting higher earnings for residential construction workers were life, physical, and social science occupations, and building and grounds cleaning and maintenance occupations. The former accounted for less one-tenth of one percent of employment in residential construction, and the latter accounted for about 1 percent of employment in residential construction.

²⁰ For other occupational wage and employment data on the construction of buildings subsector for May 2008, visit www.bls.gov/oes/2008/may/naics3_236000.htm (visited Mar. 31, 2010).

²¹ See [ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ecec-](ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ecec-qrtn.pdf)

[qrtn.pdf](ftp://ftp.bls.gov/pub/special.requests/ocwc/ect/ecec-qrtn.pdf) (visited Mar. 31, 2010) for ECEC tables by worker characteristics from March 2004 to December 2009.

²² For estimates of the median weekly earnings of union workers by occupation or industry, see data from BLS’s Current Population Survey, many of which are available at www.bls.gov/cps/lfcharacteristics.htm#union (visited Mar. 31, 2010).

²³ Standard errors for the data on union membership and establishment size in this article are not available, and, consequently, comparisons across periods should be done with caution.

²⁴ The effect of unionization on pay levels is not universally causal: issues of endogeneity must be considered. The impact of unionization may be more an indirect correlation than a direct one, as in incidences in which unions effect better trained and safer groups of workers whose pay reflects the training. See David Card, “The effect of unions on the structure of wages: a longitudinal analysis,” *Econometrica*, July 1996, pp. 957–79.

²⁵ The assignment of union status can differ between the NCS and the Current Population Survey (CPS). In the CPS, unionization refers to members of a labor union or an employee association similar to a union. See www.bls.gov/news.release/union2.nr0.htm (visited Mar. 31, 2010). The NCS definition of union status is similar to that of the CPS, but it stipulates that the union be recognized as a bargaining agent for all workers in any occupation that is selected for the sample and that there also be a signed mutually binding collective bargaining agreement that includes at least earnings provisions.

APPENDIX: Tables A-1 through A-4

Item	March 2004		March 2005		March 2006	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation	7.6	4.4	9.2	4.8	8.3	5.6
Wages and salaries	7.3	4.0	7.3	4.1	6.0	4.9
Total benefits	8.7	9.0	15.3	10.1	16.3	9.1
Paid leave	13.8	12.5	13.5	15.4	12.9	15.0
Supplemental pay	37.7	16.3	66.9	24.4	57.7	16.8
Insurance	17.1	16.2	16.4	15.7	15.9	11.9
Health	17.3	16.7	16.6	15.9	15.8	12.0
Retirement and savings	35.5	24.6	31.3	23.2	31.2	20.9
Legally required ¹	10.0	6.0	7.4	6.3	7.6	6.0
	March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation	7.0	4.8	6.0	5.1	6.3	5.1
Wages and salaries	5.1	3.9	4.7	4.6	5.2	4.4
Total benefits	15.4	8.0	12.2	8.3	11.0	8.8
Paid leave	11.4	12.6	14.0	12.4	14.5	10.9
Supplemental pay	59.7	12.6	45.1	14.7	43.5	13.7
Insurance	16.8	9.7	20.4	10.0	17.4	10.6
Health	17.2	9.6	21.1	10.0	17.8	10.7
Retirement and savings	23.5	17.8	27.1	20.2	23.5	20.0
Legally required ¹	5.7	4.3	5.5	6.1	4.1	6.6

¹ Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

Table A-2. Relative standard errors for selected characteristics, private industry, construction specialty trade (NAICS 238), March data, 2004–09

Item	March 2004		March 2005		March 2006	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation	4.2	6.2	3.6	4.2	3.5	3.4
Wages and salaries.....	3.4	5.0	3.0	3.7	2.8	2.7
Total benefits.....	7.6	9.1	6.3	5.5	6.0	5.2
Paid leave	14.2	9.5	12.0	7.8	8.5	6.3
Supplemental pay.....	11.9	11.6	9.6	8.6	9.9	9.3
Insurance.....	14.7	14.4	11.2	7.7	10.5	6.5
Health	15.1	14.6	11.5	7.7	10.7	6.5
Retirement and savings	23.1	15.2	20.0	13.0	17.4	15.3
Legally required ¹	4.6	6.7	4.8	4.0	4.6	3.6
	March 2007		March 2008		March 2009	
	Residential	Nonresidential	Residential	Nonresidential	Residential	Nonresidential
Total compensation	2.3	3.3	2.6	3.5	2.5	3.6
Wages and salaries.....	1.9	2.6	2.1	2.6	2.2	2.8
Total benefits.....	4.5	4.9	4.9	5.8	4.8	5.4
Paid leave	8.2	9.5	8.7	8.8	7.2	9.3
Supplemental pay.....	7.6	8.1	8.1	6.9	7.2	9.1
Insurance.....	9.0	6.9	9.7	8.0	9.7	7.0
Health	8.9	6.9	9.6	7.8	9.6	7.0
Retirement and savings	14.4	11.2	16.4	14.3	17.6	10.4
Legally required ¹	4.3	3.5	4.3	3.9	3.3	3.7

¹ Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

Table A-3. Differences between workers in nonresidential and residential construction of buildings (NAICS 236),¹ private industry, March data, 2004–09

Item	March 2004	March 2005	March 2006	March 2007	March 2008	March 2009
	Differences in costs per hour worked (t-statistics in parentheses) ²					
Total compensation.....	\$4.22 (1.75)	\$4.17 (1.41)	\$8.03 (2.52)	\$8.96 (3.64)	\$12.07 (4.59)	\$13.94 (5.04)
Wages and salaries.....	2.50 (1.51)	3.18 (1.80)	4.62 (2.79)	4.51 (3.43)	6.34 (3.92)	7.82 (4.63)
Total benefits.....	1.72 (1.72)	.99 (.65)	3.40 (1.99)	4.44 (3.19)	5.73 (4.66)	6.12 (4.54)
Paid leave.....	.39 (1.81)	.45 (1.80)	.63 (2.17)	.52 (2.35)	.69 (2.87)	.82 (3.20)
Supplemental pay.....	-.09 (-.24)	-.60 (-.56)	-.13 (-.16)	-.15 (-.16)	.14 (.27)	.06 (.11)
Insurance.....	.61 (1.61)	.41 (1.11)	1.08 (2.76)	1.55 (4.87)	1.80 (5.07)	1.88 (4.78)
Health.....	.54 (1.47)	.34 (.96)	.99 (2.72)	1.41 (4.66)	1.65 (4.88)	1.73 (4.62)
Retirement and savings.....	.59 (1.44)	.70 (1.67)	1.17 (2.45)	1.66 (4.38)	1.96 (4.22)	2.02 (4.02)
Legally required ³.....	.21 (.58)	.03 (.09)	.66 (1.90)	.86 (3.61)	1.14 (3.32)	1.35 (4.04)
Differences in percent of total compensation (t-statistics in parentheses) ²						
Total compensation.....	-	-	-	-	-	-
Wages and salaries.....	-2.0 (-1.06)	.8 (.27)	-3.3 (-1.09)	-5.8 (-2.10)	-7.2 (-3.62)	-6.2 (-3.08)
Total benefits.....	2.0 (1.06)	-.8 (-.27)	3.3 (1.09)	5.8 (2.10)	7.2 (3.62)	6.2 (3.08)
Paid leave.....	.8 (1.13)	.9 (1.44)	1.0 (1.42)	.5 (1.12)	.7 (1.42)	.7 (1.28)
Supplemental pay.....	-.8 (-.58)	-2.6 (-.75)	-1.6 (-0.57)	-1.8 (-.59)	-.9 (-.53)	-1.3 (-.76)
Insurance.....	1.4 (1.23)	.5 (.50)	1.8 (2.24)	3.2 (3.71)	3.4 (3.69)	3.0 (3.13)
Health.....	1.2 (1.07)	.4 (.33)	1.6 (2.12)	2.8 (3.34)	3.0 (3.39)	2.7 (2.89)
Retirement and savings.....	1.5 (1.22)	1.8 (1.51)	2.8 (2.24)	4.3 (4.62)	4.7 (4.47)	4.4 (4.10)
Legally required ³	-.9 (-.74)	-1.5 (-1.18)	-.7 (-1.06)	-.4 (-.64)	-.6 (-.90)	-.5 (-.76)

¹ Each difference is calculated as all or a part of nonresidential workers' compensation minus all or the corresponding part of residential workers' compensation.

² Differences are calculated from unrounded averages.

³ Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.

Table A-4. Differences between nonresidential and residential construction workers in the specialty trade contractors subsector (NAICS 238),¹ private industry, March data, 2004–09

Item	March 2004	March 2005	March 2006	March 2007	March 2008	March 2009
	Differences in costs per hour worked (t-statistics in parentheses) ²					
Total compensation	\$8.94 (4.80)	\$8.47 (5.88)	\$8.28 (5.92)	\$7.60 (6.42)	\$8.53 (6.35)	\$8.78 (6.42)
Wages and salaries	4.76 (4.83)	4.56 (5.21)	4.19 (5.36)	3.91 (5.78)	4.19 (5.59)	4.17 (5.32)
Total benefits	4.19 (4.37)	3.91 (6.30)	4.10 (6.25)	3.69 (6.78)	4.34 (6.55)	4.61 (7.11)
Paid leave .....	.51 (4.32)	.42 (3.95)	.54 (5.42)	.56 (4.54)	.60 (5.20)	.48 (3.94)
Supplemental pay .....	.22 (1.75)	.15 (1.73)	.34 (3.39)	.31 (3.55)	.33 (3.81)	.42 (3.95)
Insurance	1.32 (3.53)	1.32 (6.41)	1.24 (5.65)	1.27 (7.52)	1.40 (6.84)	1.64 (7.61)
Health	1.31 (3.57)	1.29 (6.45)	1.18 (5.58)	1.19 (7.39)	1.31 (6.92)	1.55 (7.56)
Retirement and savings	1.53 (4.82)	1.51 (5.16)	1.32 (4.08)	1.18 (5.91)	1.49 (5.07)	1.60 (6.80)
Legally required ³ .....	.60 (2.35)	.50 (2.43)	.65 (3.41)	.37 (1.96)	.51 (2.62)	.47 (2.68)
	Differences between percent of total compensation (t-statistics in parentheses) ²					
Total compensation	–	–	–	–	–	–
Wages and salaries	–6.3 (–3.68)	–5.4 (–5.35)	–6.0 (–6.23)	–5.4 (–6.58)	–6.6 (–6.48)	–6.9 (–7.26)
Total benefits	6.3 (3.68)	5.4 (5.35)	6.0 (6.23)	5.4 (6.58)	6.6 (6.48)	6.9 (7.26)
Paid leave .....	.9 (2.32)	.6 (1.48)	1.0 (2.54)	1.1 (3.03)	1.1 (3.39)	.6 (1.97)
Supplemental pay	–.2 (–.34)	–.3 (–.99)	.4 (1.09)	.3 (1.10)	.3 (.98)	.6 (1.94)
Insurance	3.0 (3.06)	3.0 (5.61)	2.4 (4.57)	2.8 (7.08)	2.9 (6.05)	3.4 (7.01)
Health	3.0 (3.15)	2.9 (5.62)	2.3 (4.43)	2.6 (6.87)	2.7 (6.01)	3.2 (6.91)
Retirement and savings	4.4 (5.42)	4.3 (5.27)	3.5 (3.85)	3.2 (5.86)	4.0 (5.20)	4.0 (6.95)
Legally required ³	–2.0 (–3.34)	–2.2 (–3.56)	–1.2 (–2.68)	–2.0 (–3.80)	–1.7 (–3.87)	–1.8 (–5.01)

¹ Each difference is calculated as all or a part of nonresidential workers' compensation minus all or the corresponding part of residential workers' compensation.

² Differences are calculated from unrounded averages.

³ Those benefits which are legally required are OASDI, Medicare, Federal and State unemployment insurance, and workers' compensation.