



# Construction

The Construction sector includes establishments primarily engaged in the construction of buildings or engineering projects such as utility systems and highways. The types of construction work performed includes new construction, additions, alterations, reconstruction, installation, maintenance and repairs. Establishments primarily engaged in preparation of sites for new construction and establishments primarily engaged in subdividing land for sale as building sites are also included in this sector.

Construction projects are usually coordinated by general contractors, who specialize in one type of construction such as residential or commercial building. Taking full responsibility for the complete job, general contractors may do a portion of the work with their own crews, and/or subcontract work to heavy construction or specialty trade contractors.

## Industry Cluster Profile

In 2011, Rhode Island's 3,720 Construction businesses employed an average of 15,681 workers, accounting for 4.0 percent of the state's private sector workforce. The sector paid over \$827 million in wages, accounting for 4.9 percent of total private wages paid in 2011. Overall, Construction workers earned an annual wage of \$52,750 in 2011, significantly higher than the private sector average of \$43,526.

Between 2006 and 2011, the construction industry has been strongly affected by the housing crisis and "Great Recession" resulting in the loss of over 31 percent of its employment, more than four times greater than that of the private sector (-6.8%) job loss. All three subsectors experienced employment declines during this period with Construction of Buildings posting the greatest loss on a percentage basis (-35.4%) and Specialty Trade Contractors posting the greatest loss on a numeric basis (-4,629). Since 2002 employment in Rhode Island's construction sector is down 18.8 percent (-3,636). In comparison, private sector employment fell by 3.7 percent during this period.

### Construction Employment in Rhode Island

| Industry                               | Annual Average Employment |         |         | 2002-2011 |          | 2006-2011 |          |
|--|---------------------------|---------|---------|-----------|----------|-----------|----------|
|  | 2002                      | 2006    | 2011    | Change    | % Change | Change    | % Change |
| <b>Total Private &amp; Government</b>  | 468,451                   | 480,589 | 448,532 | -19,919   | -4.3%    | -32,057   | -6.7%    |
| <b>Total Private Only</b>              | 404,079                   | 417,706 | 389,240 | -14,839   | -3.7%    | -28,466   | -6.8%    |
| <b>Total for Construction</b>          | 19,317                    | 22,803  | 15,681  | -3,636    | -18.8%   | -7,122    | -31.2%   |
| Construction of Buildings              | 4,878                     | 5,739   | 3,705   | -1,173    | -24.0%   | -2,034    | -35.4%   |
| Heavy & Civil Engineering Construction | 1,998                     | 2,107   | 1,648   | -350      | -17.5%   | -459      | -21.8%   |
| Specialty Trade Contractors            | 12,441                    | 14,957  | 10,328  | -2,113    | -17.0%   | -4,629    | -30.9%   |

To highlight the substantial differences in the types of work projects, equipment requirements and workforce skills required by establishments in this sector, Construction is broken down into three subsectors – Construction of Buildings, Heavy & Civil Engineering Construction, and Specialty Trade Contractors.

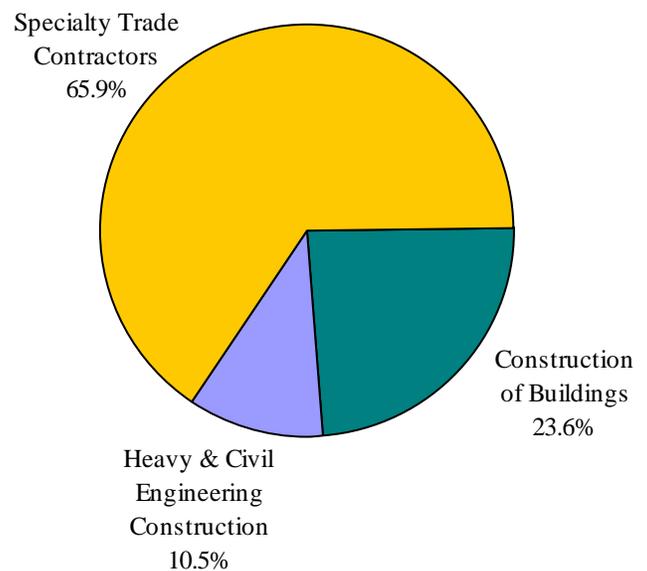
The Construction of Buildings subsector includes establishments of the general contractor type. Establishments are primarily responsible for the construction of buildings, including new work, additions, alterations, or maintenance and repairs of buildings, either residential, commercial or industrial. In 2011, these businesses employed an average of 3,705 workers and accounted for over one-fifth (23.6%) of all Construction employment in Rhode Island. The average annual wage for Construction of Buildings employees was \$56,261.

Heavy & Civil Engineering Construction includes establishments

whose primary activity is the construction of entire engineering projects, including utility system construction, land subdivision and highway, street, and bridge construction. In 2011, these businesses employed 1,648 workers, or 10.5 percent of Construction employment. The average annual wage for Heavy & Civil Engineering Construction was \$69,900, the highest annual wage among the three Construction subsectors.

Specialty Trade Contractors perform specific activities in building construction but are not responsible for the entire project. Specialty Trade Contractors might specialize in framing, masonry, siding, glass work, plumbing, electrical, flooring, painting, carpentry, excavation or other specialized trade. These contractors usually do the work of one trade, such as painting, carpentry, or electrical work, or of two or more closely related trades, such as plumbing and heating. Specialty Trade Contractors establishments employed 10,328 workers in 2011, representing 65.9 percent of all construction workers in the state. The average annual wage for Specialty Contractors was \$48,755, the lowest annual wage among the three Construction subsectors.

### Construction Employment by Subsector, 2011



### Construction in Rhode Island 2011

| Industry                               | Number of Units | Average Employment | Total Wages             | Average Wage    |
|--|-----------------|--------------------|-------------------------|-----------------|
| <b>Total Private &amp; Government</b>  | <b>34,942</b>   | <b>448,532</b>     | <b>\$20,498,159,788</b> | <b>\$45,701</b> |
| <b>Total Private Only</b>              | <b>34,225</b>   | <b>389,240</b>     | <b>\$16,942,221,360</b> | <b>\$43,526</b> |
| <b>Total for Construction</b>          | <b>3,720</b>    | <b>15,681</b>      | <b>\$827,180,211</b>    | <b>\$52,750</b> |
| Construction of Buildings              | 1,118           | 3,705              | \$208,447,213           | \$56,261        |
| Heavy & Civil Engineering Construction | 180             | 1,648              | \$115,195,358           | \$69,900        |
| Specialty Trade Contractors            | 2,423           | 10,328             | \$503,537,640           | \$48,755        |

## Construction Employment as Percent of Private Sector Employment, 2011

| Industry                               | US          | CT          | MA          | ME          | NH          | RI          | VT          |
|--|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>Total Private &amp; Government</b>  | 129,408,962 | 1,612,372   | 3,187,984   | 579,745     | 605,713     | 448,532     | 295,449     |
| <b>Total Private Only</b>              | 108,165,289 | 1,374,880   | 2,776,765   | 482,391     | 520,206     | 389,240     | 243,123     |
| <b>Total for Construction</b>          | <b>5.1%</b> | <b>3.7%</b> | <b>4.0%</b> | <b>5.2%</b> | <b>4.3%</b> | <b>4.0%</b> | <b>5.8%</b> |
| Construction of Buildings              | 1.1%        | 0.8%        | 0.8%        | 1.2%        | 1.0%        | 1.0%        | 1.6%        |
| Heavy & Civil Engineering Construction | 0.8%        | 0.4%        | 0.4%        | 0.6%        | 0.5%        | 0.4%        | 0.7%        |
| Specialty Trade Contractors            | 3.2%        | 2.6%        | 2.7%        | 3.4%        | 2.8%        | 2.7%        | 3.6%        |

Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages

In 2011, Construction establishments in Rhode Island comprise 4.0 percent of all private sector employment, 1.1 percentage points below the national average of 5.1 percent. Regionally, Rhode Island, along with Massachusetts, was tied for fourth in the percentage of private sector workers in Construction, trailing Vermont (5.8%), Maine (5.2%) and New Hampshire (4.3%). Of the New England states, only Vermont and Maine had a percentage of Construction workers in the private sector workforce higher than the national average.

### Occupations Profile



Construction offers a great variety of career opportunities for individuals with many different talents and educational backgrounds. Managers, clerical workers, truck drivers, trades workers, and construction helpers can all find job opportunities in the construction sector.

Most of the workers (60%) in the construction sector are construction trades workers and helpers, which include master, journey, apprentice, and laborers. Skills needed for these jobs are often learned on-the-job through formal or informal apprenticeship training programs.

Entry level workers may start as helpers assisting more experienced workers. During this time they may elect to attend a trade or vocational school or attend a community college to receive additional trade related training. Many trades workers advance to supervisory positions or may go on to own their own business. Construction offers more opportunities than most industries for individuals who want to own their own businesses.

Jobs where necessary skills are learned on-the-job make up the largest portion of the Construction sector jobs accounting for over 80 percent of the sector's employment. In comparison, on-the-job training jobs account for approximately 60 percent of the state's private sector employment.

Wages for occupations most commonly found in the Construction sector range from \$11.76 per hour for Paving, Surfacing & Tamping Equipment Operators to \$58.48 per hour for Construction Managers. The median wage for most Construction jobs generally exceed the national average but trail median wages paid in Massachusetts and Connecticut.

### Employment by Education/Training Requirements

|                             | Cluster Share | Private Sector |
|-----------------------------|---------------|----------------|
| Bachelor's degree or higher | 8%            | 21%            |
| Associate degree            | 0%            | 5%             |
| Postsecondary Vocational    | 1%            | 6%             |
| Work Experience             | 8%            | 8%             |
| Long-Term OJT               | 38%           | 7%             |
| Moderate-Term OJT           | 33%           | 17%            |
| Short-Term OJT              | 11%           | 35%            |



## Occupations Commonly Found in Construction

| Occupations   | Estimated RI Employment | Education & Training Code | Median Wages |       |       |       |
|---|-------------------------|---------------------------|--------------|-------|-------|-------|
|   |                         |                           | US           | RI    | MA    | CT    |
| Bookkeeping, Accounting, & Auditing   |                         |                           |              |       |       |       |
| Clerks  | 410                     | 10                        | 16.36        | 17.50 | 18.72 | 18.93 |
| Brickmasons & Blockmasons   | 450                     | 9                         | 22.56        | 26.62 | 41.57 | 28.88 |
| Carpenters  | 2,150                   | 9                         | 19.00        | 21.16 | 24.52 | 24.15 |
| Cement Masons & Concrete Finishers  | 230                     | 10                        | 17.04        | 20.46 | 21.57 | 22.38 |
| Construction Laborers   | 1,440                   | 10                        | 14.08        | 18.52 | 20.56 | 20.44 |
| Construction Managers   | 270                     | 5                         | 40.32        | 58.48 | 44.39 | 43.36 |
| Cost Estimators   | 440                     | 5                         | 27.82        | 29.82 | 33.53 | 31.84 |
| Electricians  | 1,020                   | 9                         | 23.20        | 23.77 | 28.08 | 26.09 |
| Excavating & Loading Machine & Dragline Operators                           | 240                     | 10                        | 17.75        | 22.44 | 22.35 | 18.85 |
| First-Line Supervisors of Construction Trades & Extraction Workers          | 870                     | 8                         | 28.21        | 31.80 | 33.39 | 32.99 |
| General & Operations Managers   | 250                     | 4                         | 45.38        | 51.79 | 48.58 | 57.87 |
| Glaziers  | 180                     | 9                         | 17.61        | 19.82 | 19.54 | 19.49 |
| Heating, Air Conditioning, & Refrigeration Mechanics & Installers           | 440                     | 9                         | 20.45        | 23.28 | 25.94 | 25.73 |
| Heavy & Tractor-Trailer Truck Drivers                                       | 340                     | 10                        | 18.16        | 19.99 | 20.35 | 20.29 |
| Helpers-Carpenters  | 230                     | 11                        | 12.38        | 14.97 | 16.76 | 14.69 |
| Helpers-Electricians  | 120                     | 11                        | 13.08        | 14.34 | 16.20 | 16.63 |
| Landscaping & Groundskeeping Workers  | n/a                     | 11                        | 11.25        | 12.43 | 14.53 | 14.04 |
| Office Clerks, General  | 470                     | 11                        | 12.79        | 13.81 | 15.41 | 15.00 |
| Operating Engineers & Other Construction Equipment Operators                | 390                     | 10                        | 19.42        | 26.11 | 26.12 | 26.27 |
| Painters, Construction & Maintenance  | 600                     | 10                        | 16.48        | 17.02 | 19.77 | 18.11 |
| Paving, Surfacing, & Tamping Equipment Operators                            | 210                     | 10                        | 16.42        | 11.76 | 22.46 | 22.42 |
| Plumbers, Pipefitters, & Steamfitters                                       | 960                     | 9                         | 22.43        | 24.01 | 27.84 | 26.82 |
| Roofers   | 340                     | 10                        | 16.45        | 16.66 | 23.08 | 26.93 |
| Secretaries & Administrative Assistants, Except Legal, Medical, & Executive | 290                     | 10                        | 14.82        | 17.19 | 18.47 | 18.06 |
| Sheet Metal Workers   | 380                     | 9                         | 20.05        | 21.45 | 23.85 | 22.75 |
| Tapers  | n/a                     | 10                        | 21.87        | 20.48 | 25.21 | 27.60 |

**Education & Training Code & Description:** 1 First professional degree; 2 Doctoral degree; 3 Master's degree; 4 Bachelor's or higher degree, plus work experience; 5 Bachelor's degree; 6 Associate degree; 7 Postsecondary vocational training; 8 Work experience in a related occupation 9 Long-term on-the-job training; 10 Moderate-term on-the-job training; 11 Short-term on-the-job training

Wages are from May 2010 OES Survey. Annual salaries reported for occupations with non-standard work weeks.

n/a: Wage or Employment Not Available

