

# Is Middle Class Entry Possible Without a College Degree?

A Look at Construction & Extraction Jobs in Colorado

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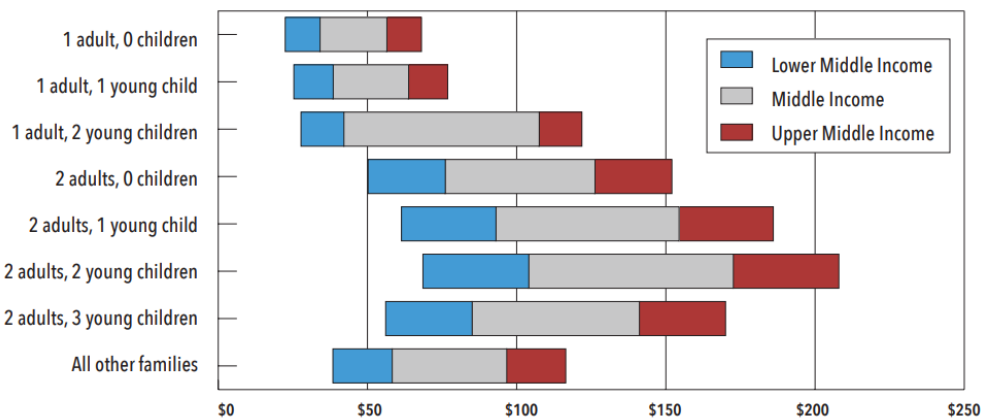
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There are 33 high-growth construction and extraction jobs that can move a Colorado family into the middle class, however, this is largely dependent on family type and both adults working. Also, while these jobs can typically move a family into the lower-middle or middle-income range, they rarely can move a family into the upper middle class. Below, we will discuss construction and extraction jobs in Colorado, and their potential for middle class mobility.

In our [recent report on middle class families](#), the Bell examined the size of the middle class in Colorado, what it takes to move into our state’s middle class in terms of income, and the characteristics of our middle class. To do this, we used the income-based definition used by Pew Research Center where a family is considered “middle income” if it makes between two-thirds and double the median family income.

In 2016, the statewide median income was \$59,000 across all family types, implying middle income means a family must have earned between \$38,900 and \$118,000 that year. However, this range varies by family size (see Figure 1 below, from the aforementioned report). This wide range can be broken down into three smaller groups: within Colorado’s middle-income earners in 2016, 49.6 percent of families were upper middle income, 32.1 percent were middle income, and 18.3 percent were lower middle income.<sup>i</sup>

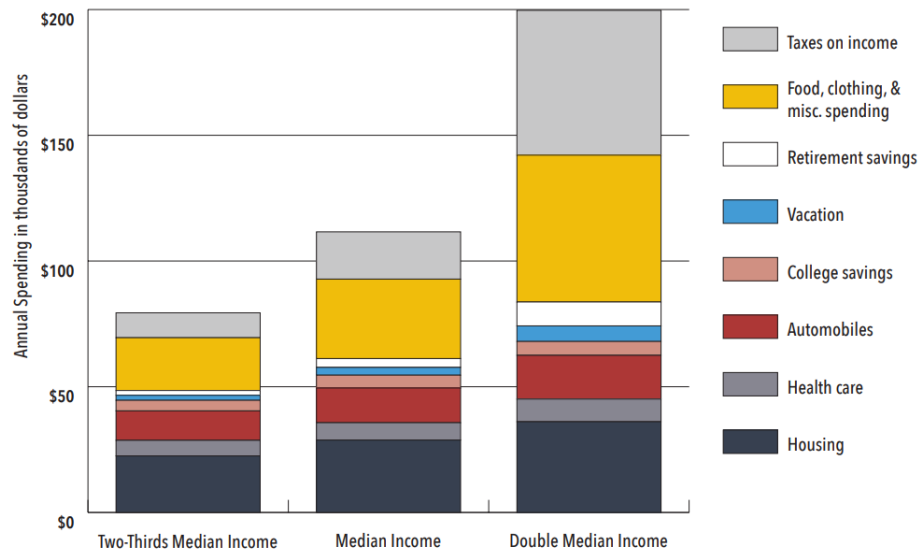
**FIGURE 1: COLORADO FAMILY INCOME BY MIDDLE INCOME CLASS AND FAMILY TYPE, 2016**



Note: Dollars are in thousands.

But a middle income doesn’t guarantee a middle class lifestyle, as the latter means having the funds to afford middle class mainstays, like housing, health care, automobile ownership, retirement savings, college savings, and/or vacation. This type of “aspirational” budget often requires income above and beyond that which can simply move a family into one of these middle class categories.

**FIGURE 2: EXAMPLE MIDDLE CLASS BUDGET FOR TWO-ADULT, TWO-CHILD FAMILIES IN COLORADO, 2016  
(HOMEOWNERS WITH CHILDREN IN SCHOOL)**



Since wages account for most or all of a Colorado family’s income, an individual’s occupation is critical for mobility into the middle class and beyond. Thus, the report also considers which jobs are more likely to pay wages enabling entry into the middle-income range, and those more likely to provide wages that could improve a family’s economic mobility over time.

In 2016, a majority of Colorado’s middle-income, two-adult families had both adults working, with at least one adult working in a professional or managerial job (which often requires at least a bachelor’s degree). In fact, college degrees are quite common among families in the middle class. Approximately 82 percent of upper-income families, 57 percent of middle-income families, and 33 percent of lower-income families have at least one head of household with a bachelor’s degree.

However, when presenting the findings of our middle class report, we were often asked whether a family can achieve a middle class lifestyle without a college education. Construction and extraction jobs were commonly mentioned as alternatives to the professional and managerial jobs that commonly require (increasingly costly) degrees. These jobs tend to pay good wages, have low barriers to entry and on-the-job training, and often have positive wage trajectories for experienced workers. (See Figure A1 in Appendix A for construction and extraction jobs ranked by wage increase over time.)

To answer this question, we gathered data on:

- Common construction and extraction jobs, and 2017 entry and experienced wages for these jobs with faster than average projected growth
- Occupational requirements for these high-growth jobs
- Who occupies these jobs
- Which of these jobs might be able to move a family into the middle class.<sup>ii</sup>

What we found suggests some families may indeed be able to enter the middle class through jobs in the construction and extraction industries. There are several jobs with high wages, especially for experienced workers, and there are many with sizable wage growth over a career. However, there are almost no jobs that can get a family — especially one with young children — into the upper-income range of the middle class, even when there are two adults working. This is particularly important, as our report shows those in the lower-middle- and middle-income ranges have a more difficult time affording an aspirational middle class budget.<sup>iii</sup>

Furthermore, these industries are male-dominated, meaning there are (historically) fewer opportunities for women, although efforts are underway in Colorado to address this. Finally, more work must be done in the state to identify areas of over or underrepresentation, by race, in specific jobs.

## Background on Construction & Extraction

In 2017, the seven most common construction and extraction jobs in Colorado (i.e., those with more than 5,000 workers) were:

- Construction Laborers (21,250)
- Electricians (15,070)
- Supervisors of construction and extraction workers (14,280)
- Carpenters (13,750)
- Operating engineers and equipment operators (9,950)
- Plumbers, pipefitters, and steamfitters (9,260)
- Cement masons and concrete finishers (5,790)

Currently, there are over 163,000 workers in Colorado’s construction and extraction industry, which makes up [nearly 7 percent](#) of all jobs in the state.

Of the jobs listed above, all but electricians are set to grow at a faster or much faster than average pace between 2016 and 2026 compared to all other jobs in the U.S. economy. On average, the construction and extraction industries are projected to grow nationally at a faster than average rate during this period, compared to other industries. Of the 50 construction and extraction occupations listed in data from the [Bureau of Labor Statistics \(BLS\)](#),<sup>iv</sup> 35 are expected to grow at a faster (25), or much faster (10) than the average pace of all other U.S. jobs.<sup>v</sup>

Average entry level wages for these 35 high-growth jobs were approximately \$33,220 in Colorado in 2017, ranging from \$23,457 to \$49,753. Average experienced wages were about \$51,736 in the state and ranged from \$36,159 to \$87,505. Given the lower end of the middle class range is \$38,900, several of these jobs seem, at first glance, to qualify as middle class jobs.

**TABLE 1: CONSTRUCTION & EXTRACTION JOBS LIKELY TO MOVE ANY FAMILY INTO MIDDLE CLASS (2017)**

Occupation	Entry-Level Wages (\$)	Experienced Wages (\$)	Number of Jobs	High-Growth Job (Y/N)
Elevator Installers & Repairers	49,753	87,505	520	Y
Supervisors of Construction & Extraction Workers	48,060	82,809	14,280	Y
Construction & Building Inspectors	41,738	73,290	2,280	Y
Rotary Drill Operators, Oil & Gas	34,527	62,498	990	Y

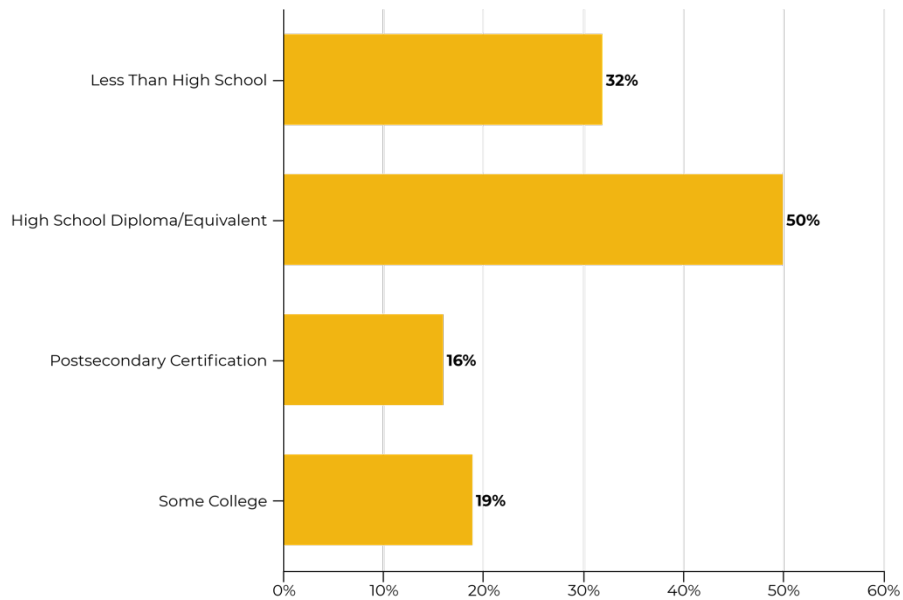
### What’s Required?

BLS data show 27 of these 35 high-growth jobs require at least a high school diploma or equivalent, two require less than a high school diploma, and six require no formal credential. However, BLS data also show there are, on average, higher percentages of workers with at least some college in these high-growth jobs, compared to those construction and extraction jobs with no projected growth (19 percent vs. 6 percent).

While many construction and extraction workers have a high school diploma, or less than high school, these data show there are more college-educated workers in high-growth jobs in these industries, suggesting the jobs with the most growth may attract more educated individuals.

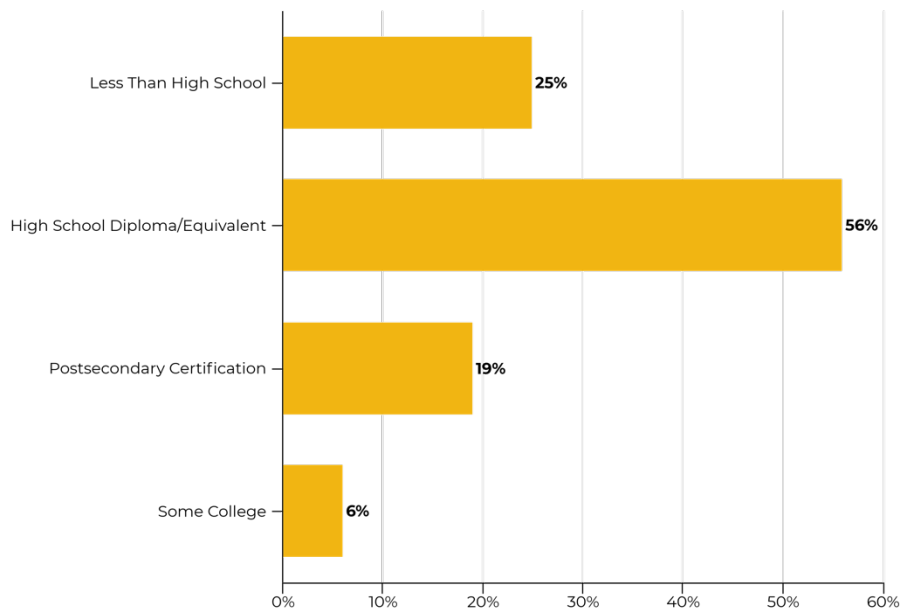
As for training, 11 of the 35 jobs with faster-than-average growth require an apprenticeship, 12 require moderate on-the-job training, and 12 require short on-the-job training.

**FIGURE 3: AVERAGE EDUCATIONAL ATTAINMENT OF WORKERS IN CONSTRUCTION & EXTRACTION JOBS WITH FASTER-THAN-AVERAGE PROJECTED GROWTH**



Source: Bureau of Labor Statistics, [https://www.bls.gov/oes/current/oes\\_stru.htm](https://www.bls.gov/oes/current/oes_stru.htm)

**FIGURE 4: AVERAGE EDUCATIONAL ATTAINMENT IN CONSTRUCTION & EXTRACTION JOBS WITH AVERAGE OR NO PROJECTED GROWTH**



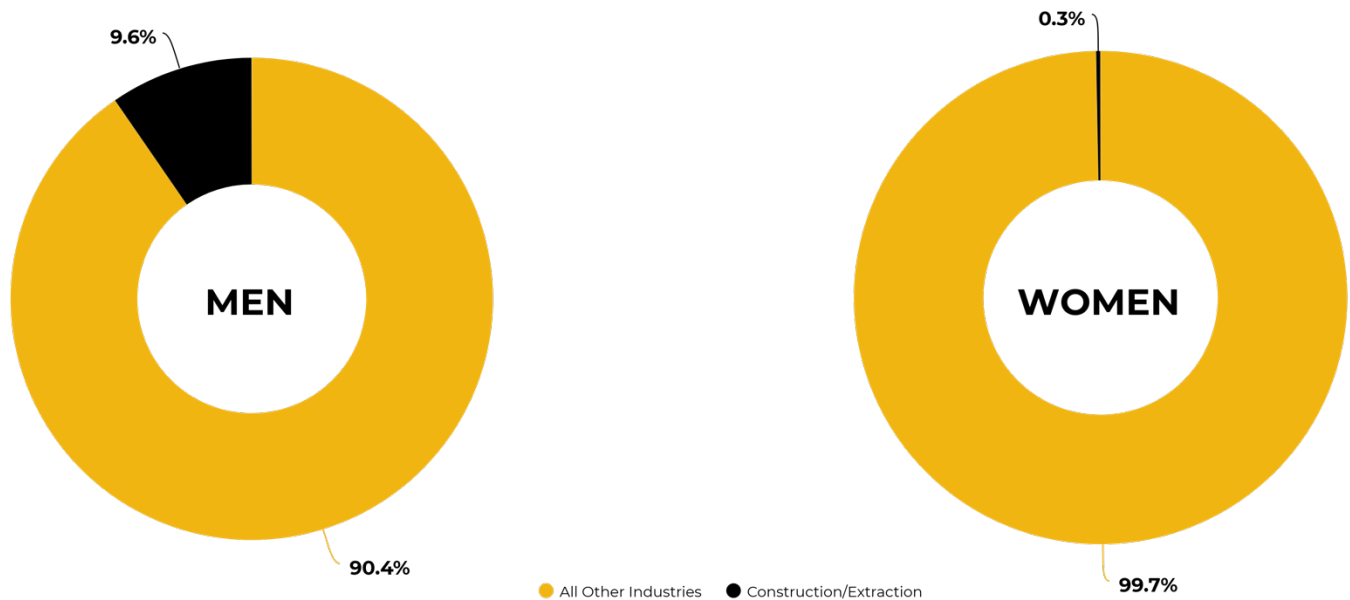
Source: Bureau of Labor Statistics, [https://www.bls.gov/oes/current/oes\\_stru.htm](https://www.bls.gov/oes/current/oes_stru.htm)

## Who Works in Construction & Extraction?

In 2017, an estimated 163,454 people, or about 7 percent of the state’s workforce, worked in construction in Colorado. By 2027, [estimates suggest](#) 220,459 people will work in construction in the state, a ten-year increase of about 35 percent.

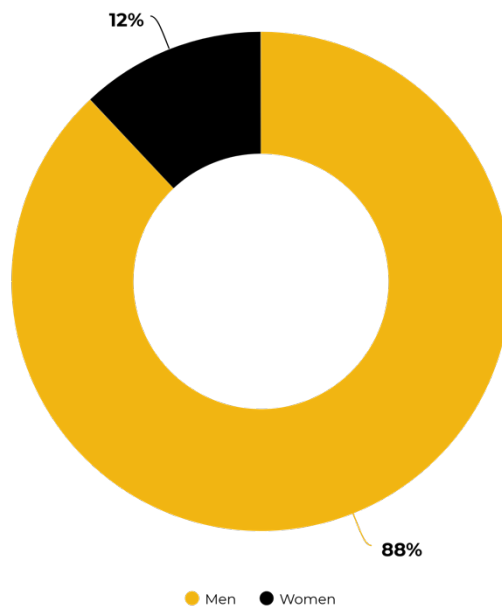
Nearly 8 million men and 243,000 women were employed in construction and extraction jobs in the United States in 2017, representing nearly 10 percent of all employed men and less than 1 percent of all employed women. Between 2015 and 2017, Colorado’s [construction and extraction workforce](#) was approximately 88 percent men and 12 percent women. This means men are overrepresented by about 38 percent, while women are underrepresented by the same amount.

**FIGURE 5: U.S. WORKING MEN & WOMEN IN CONSTRUCTION & EXTRACTION VS. ALL OTHER INDUSTRIES**



Source: Bureau of Labor Statistics, [https://www.bls.gov/oes/current/oes\\_stru.htm](https://www.bls.gov/oes/current/oes_stru.htm)

**FIGURE 6: PROPORTION OF MEN & WOMEN IN COLORADO CONSTRUCTION & EXTRACTION**



Source: Bureau of Labor Statistics, [https://www.bls.gov/oes/current/oes\\_stru.htm](https://www.bls.gov/oes/current/oes_stru.htm)

Between 2015 and 2017, Colorado’s [construction and extraction workforce](#) was 88 percent white, 33 percent Hispanic/Latino, less than 2 percent black/African American, and less than 1 percent Asian.

In Colorado construction and extraction jobs, whites are overrepresented compared to the overall Colorado workforce and the total U.S. workforce, but equally represented compared to the U.S. construction and extraction labor force. Hispanics/Latinos are overrepresented compared to the overall Colorado workforce and the total U.S. workforce, but underrepresented compared to the U.S. construction and extraction labor force. Blacks/African Americans and Asians are underrepresented compared to the overall Colorado workforce, the total U.S. workforce and the U.S. construction and extraction labor force.

**TABLE 2: RACE & ETHNICITY IN CONSTRUCTION & EXTRACTION**

Race/Ethnicity	Colorado Construction & Extraction Jobs	U.S. Construction & Extraction Jobs	Colorado Workforce	Total U.S. Workforce
White	88%	88%	84%	78%
Black/African American	1.6%	6.9%	4.2%	13%
Asian	0.002%	1.6%	1%	6%
Hispanic/Latino	33%	36%	21%	17%

### Which Construction & Extraction Jobs Offer Middle Class Entry?

Below, we identify the number of high-growth construction jobs that can move a two-adult family with children (with one or both adults working), a single-parent family, and a childless family (with one or both adults working) into the middle class. In 2016, only 24 percent of middle class families had young children in the home, demonstrating both the increase in the average age of the middle class (many are older adults with or without adult children), and the difficulty of entering the middle class and staying there when paying for the costs associated with having children, such as child care.

Overall, 33 of the 35 construction and extraction jobs with faster or faster-than-average projected growth could move at least one type of family into the middle class. Several could move multiple family types into the middle class.

#### *Two-Adult Households*

For two-adult households with children, most jobs that can move a family into the middle class can either move them into the lower-middle-income or middle-income range (see Figure 7 below). Elevator installers and repairers — which has the highest median wages of any construction and extraction job, as well as the highest entry-level, experienced, and average wages — is the only job that could enable two working adults with three children into the upper-middle-income range. (See Appendix B for full list of jobs used for Figures 7-9.)

Jobs that can move a family with both adults working into the lower-middle-income or middle-income ranges include:

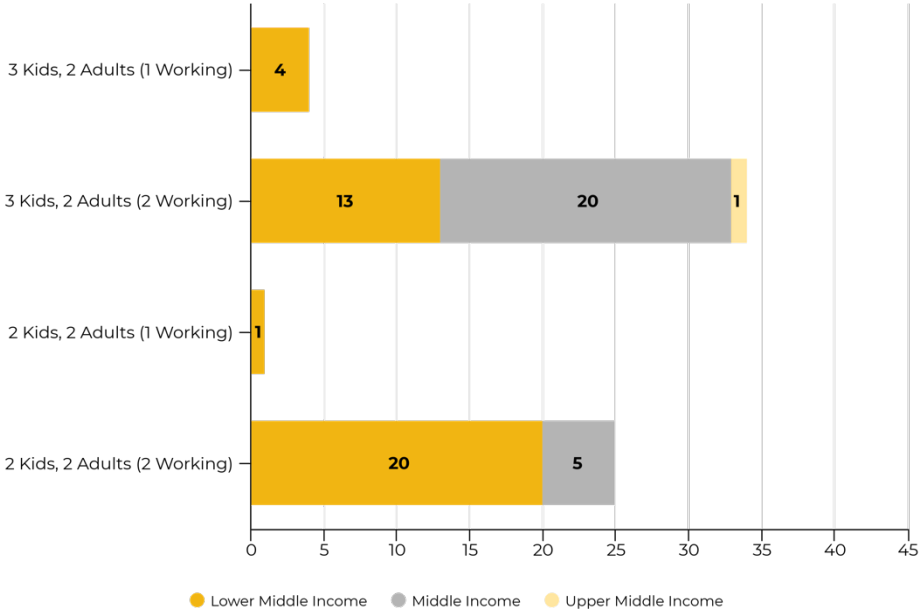
- Roofers
- Plumbers, pipefitters, and steamfitters
- Derrick operators, oil and gas.

Jobs that can move a family with one adult working into these income ranges are limited to the two jobs with the highest median income in these industries:

- Elevator installers and repairers
- Supervisors of construction and extraction workers

This is because the working adult would alone have to earn enough to move a family into the middle class, and several construction and extraction jobs don’t provide high enough wages to enable a single person to afford a middle class lifestyle.

**FIGURE 7: NUMBER OF HIGH-GROWTH CONSTRUCTION & EXTRACTION JOBS THAT CAN MOVE A TWO-ADULT HOUSEHOLD INTO THE MIDDLE CLASS (USING MEDIAN WAGES)**



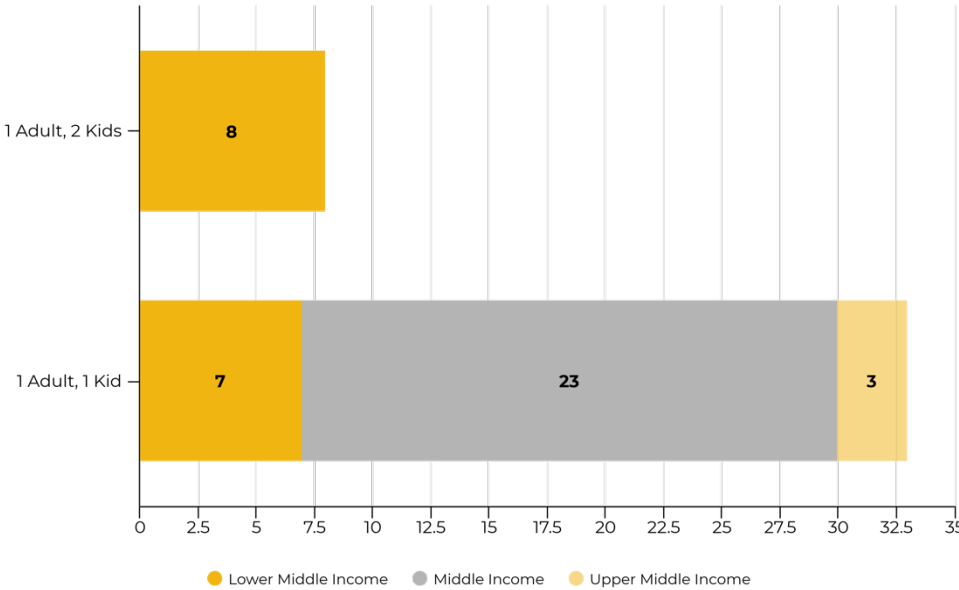
Source: Bell analysis of BLS data

*Single-Parent Households*

For single-parent households with children, the story is similar. In this case, three jobs (elevator installers and repairers, supervisors of construction and extraction workers, and construction and building inspectors) can move a single-parent family with one child into the upper-middle-income range. Jobs that can move single-parent families into the lower-middle-income or middle-income ranges include:

- Rotary drill operators, oil and gas
- Service unit operators, oil and gas
- Reinforcing iron and rebar workers

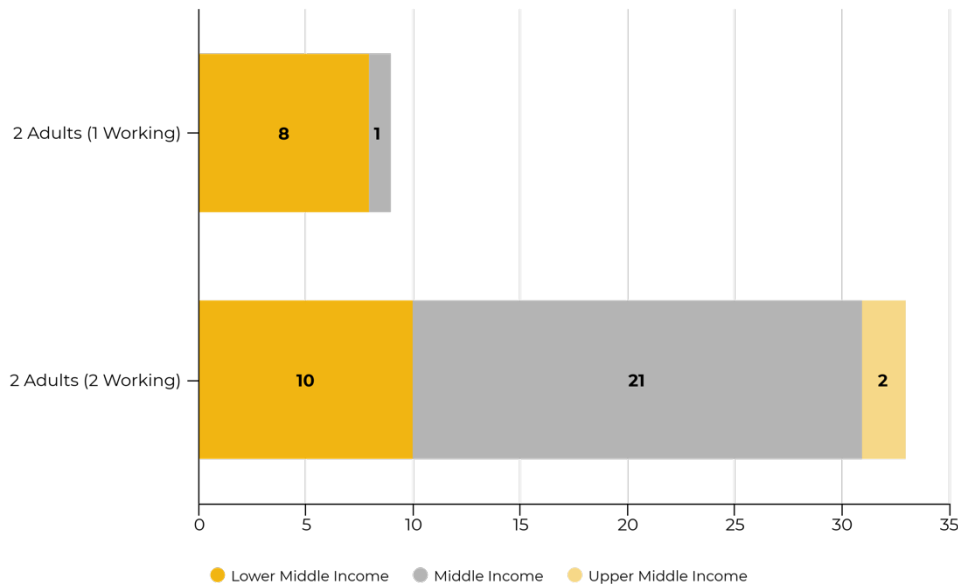
**FIGURE 8: NUMBER OF HIGH-GROWTH CONSTRUCTION & EXTRACTION JOBS THAT CAN MOVE A SINGLE-PARENT HOUSEHOLD INTO THE MIDDLE CLASS (USING MEDIAN WAGES)**



Source: Bell analysis of BLS data

Finally, for childless households, only two jobs (elevator installers and repairers, and supervisors of construction and extraction workers) could get a family with two working adults into the upper-middle-income range (see Figure 9 below). Jobs that can move childless families into the lower-middle-income or middle-income ranges include those listed above for two-adult households, as well as brickmasons and blockmasons and fence erectors.

**FIGURE 9: NUMBER OF HIGH-GROWTH CONSTRUCTION & EXTRACTION JOBS THAT CAN MOVE A CHILDLESS HOUSEHOLD INTO THE MIDDLE CLASS (USING MEDIAN WAGES)**



Source: Bell analysis of BLS data

It appears several construction and extraction jobs can, in fact, help a family move into the middle class. The data above demonstrate there's some truth to the claim that construction and extraction jobs may be an alternative to getting into the middle class without earning a costly college degree, but not all of these jobs can help a family afford a middle class lifestyle.

## Takeaways & Recommendations

### *Middle Class Income vs. Middle Class Lifestyle*

While there's evidence that some construction and extraction jobs can get a family into the middle class, one question remains: What part of the middle class? According to our research, only a few high-growth positions in these industries can get a family of any type into the upper-middle-income range. Most of these jobs can get a family into the lower-middle-income or middle-income ranges, but families in these brackets have a more difficult time affording an aspirational middle class budget. While construction and extraction jobs provide a promising avenue for economic mobility, the degree of mobility may not be as pronounced as some believe, and whether or not these workers can live a middle class lifestyle remains to be seen.

While many jobs in these industries are projected to grow at a faster-than-average rate in the coming years, some jobs may be better equipped than others to move families into the middle class. In order to create more opportunities for mobility, enhance wages, and promote economic mobility and family stability over time, the construction and extraction industries must create more opportunities for workers to advance and build on their skills over the course of their careers. Programs that promote lifelong learning, stackable credentialing, and ongoing certification can help ensure workers can grow in their positions and remain employable over time.



## *Women Underrepresented*

Additionally, nearly one-third of high-growth jobs in construction and extraction require an apprenticeship, but [recent research](#) on women and workforce training shows women make up only 6 percent of registered apprentices in Colorado. Although women are more likely to complete registered apprenticeships than their male counterparts (40 percent vs. 27 percent), they're vastly underrepresented in construction apprenticeships, which account for 80 percent of all apprenticeships in Colorado. While a full explanation for this gap is unclear, women [report](#) experiencing harassment in male-dominated industries, and say they had to prove their abilities to be treated respectfully by male colleagues.

Because these industries primarily employ men, women have been less able to take advantage of the economic mobility available within them. Apprenticeships and other training programs attempting to grow this workforce must address the issues preventing women from full participation in these industries. Harassment may be a good place to start, but family supports are also important. For example, working parents need child care, but 30 percent of Coloradans live in a child care desert, meaning there aren't enough licensed child care slots for the number of children who need them. The Center for American Progress correlates child care deserts with [lower maternal workforce participation rates](#). Local economies must find ways to improve child care access and affordability to stimulate growth.

## *Racial & Ethnic Representation*

Compared to the overall Colorado workforce, whites and Hispanics/Latinos are overrepresented, while blacks/African Americans and Asians are underrepresented in Colorado construction and extraction. More work must be done in these industries to determine which groups are represented in various jobs, and if there is any racial or ethnic segmentation in high-paying jobs (such as managers or supervisors) versus lower-paying jobs (such as helpers).

As construction and extraction jobs continue to grow and as programs develop to meet workforce and training needs, policymakers, state agencies, and businesses must work to ensure certain racial or ethnic groups aren't funneled or tracked into particular segments of these industries (e.g., managers/supervisors vs. laborers), and all groups have an equal opportunity to advance training and enhance wages throughout their careers. (See Figure A3 in Appendix A for a demographic breakdown of some of Colorado's high-growth construction and extraction jobs.) Where these opportunities are available, the outlook for the state's economy, and for Colorado families' economic mobility, is bright.

## Appendix A: Figures

**FIGURE A1: CONSTRUCTION & EXTRACTION JOBS, WITH WAGE INCREASE MEASURE FROM ENTRY LEVEL TO EXPERIENCED\***

Occupation	2017 Entry-Level Wages (\$)	2017 Experienced Wages (\$)	Wage Increase Measure (\$)	Wage Increase Measure (%)
Elevator Installers & Repairers	49,753	87,505	+37,752	+75.9%
Supervisors of Construction & Extraction Workers	48,060	82,809	+34,749	+72.3%
Construction & Building Inspectors	41,738	73,290	+31,552	+75.6%
Electricians	34,527	62,498	+27,971	+81.0%
Service Unit Operators, Oil & Gas	35,858	62,234	+26,376	+73.6%
Tapers	34,184	60,459	+26,275	+76.9%
Plumbers, Pipefitters, & Steamfitters	35,200	59,922	+24,722	+70.2%
Sheet Metal Workers	32,023	56,259	+24,236	+75.7%
Boilermakers	40,960	64,950	+23,990	+58.6%
Reinforcing Iron & Rebar Workers	36,982	60,878	+23,896	+64.6%
Rail-Track Laying & Maintenance Equipment Operators	46,733	70,492	+23,759	+50.8%
Septic Tank Servicers & Sewer Pipe Cleaners	31,052	54,401	+23,349	+75.2%
Carpenters	29,498	52,805	+23,307	+79.0%
Structural Iron & Steel Workers	33,784	56,618	+22,834	+67.6%
Rotary Drill Operators, Oil & Gas	41,531	64,156	+22,625	+54.5%
Floor Layers, Except Carpet, Wood, & Hard Tiles	28,496	50,428	+21,932	+77.0%
Extraction Workers, All Other	35,132	56,815	+21,683	+61.7%
Glaziers	30,483	51,393	+20,910	+68.6%
Tile & Marble Setters	29,045	49,527	+20,482	+70.5%
Pipelayers	33,619	52,792	+19,173	+57.0%
Stonemasons	23,457	41,138	+17,681	+75.4%
Cement Masons & Concrete Finishers	30,628	48,106	+17,478	+57.1%
Operating Engineers & Other Const. Equip. Operators	37,381	54,700	+17,319	+46.3%
Brickmasons & Blockmasons	41,807	59,088	+17,281	+41.3%
Roustabouts, Oil & Gas	32,614	49,596	+16,982	+52.1%
Carpet Installers	32,986	49,883	+16,897	+51.2%
Insulation Workers, Mechanical	33,493	50,086	+16,593	+49.5%
Roofers	29,100	45,644	+16,544	+56.9%
Helpers – Painters, Paperhangers, Plasterers, & Stucco Masons	25,029	41,022	+15,993	+63.9%
Misc. Construction & Related Workers	30,602	46,126	+15,524	+50.7%
Derrick Operators, Oil & Gas	40,812	56,295	+15,483	+37.9%
Construction Laborers	25,219	40,640	+15,421	+61.1%
Continuous Mining Machine Operators	50,511	65,368	+14,857	+29.4%
Paving, Surfacing, & Tamping Equipment Operators	32,404	47,127	+14,723	+45.4%
Drywall & Ceiling Tile Installers	35,212	49,841	+14,629	+41.5%
Helpers – Construction Trades, All Other	25,744	40,144	+14,370	+55.8%
Hazardous Materials Removal Workers	33,252	47,493	+14,241	+42.8%
Earth Drillers, Except Oil & Gas	40,416	54,606	+14,190	+35.1%
Helpers – Pipelayers, Plumbers, Pipefitters, & Steamfitters	24,233	38,042	+14,190	+58.6%
Insulation Workers, Floor, Ceiling, & Wall	26,256	39,687	+13,431	+51.2%
Highway Maintenance Workers	33,356	46,538	+13,182	+39.5%

Rock Splitters, Quarry	32,472	45,602	+13,130	+40.4%
Painters, Construction & Maintenance	31,958	44,849	+12,891	+40.3%
Fence Erectors	27,096	39,820	+12,724	+47.0%
Plasterers & Stucco Masons	26,210	38,208	+11,998	+45.8%
Mining Machine Operators, All Other	40,828	52,560	+11,732	+28.7%
Helpers – Brickmasons, Blockmasons, Stonemasons, & Tile & Marble Setters	30,878	40,920	+10,042	+32.5%
Floor Sanders & Finishers	33,112	43,135	+10,023	+30.3%
Helpers – Extraction Workers	32,707	40,025	+7,318	+22.4%
Helpers – Carpenters	29,274	36,159	+6,885	+23.5%

\*Note: Jobs are ranked in this way to demonstrate which jobs have the highest numerical wage increases over time, from entry level to experienced. Wage data are from the Bureau of Labor Statistics, <https://data.bls.gov>.

**FIGURE A2: CONSTRUCTION AND EXTRACTION JOBS WITH HIGH PROJECTED GROWTH\***

Occupation	Faster-Than-Average Growth	Much Faster-Than-Average Growth
Elevator Installers & Repairers	X	
Supervisors of Construction & Extraction Workers	X	
Construction & Building Inspectors	X	
Service Unit Operators, Oil & Gas		X
Plumbers, Pipefitters, & Steamfitters		X
Reinforcing Iron & Rebar Workers	X	
Septic Tank Servicers & Sewer Pipe Cleaners		X
Structural Iron & Steel Workers	X	
Rotary Drill Operators, Oil & Gas		X
Floor Layers, Except Carpet, Wood, & Hard Tiles	X	
Extraction Workers, All Other		X
Glaziers	X	
Tile & Marble Setters	X	
Pipelayers		X
Stonemasons	X	
Cement Masons & Concrete Finishers	X	
Operating Engineers & Other Const. Equip. Operators	X	
Brickmasons & Blockmasons	X	
Roustabouts, Oil & Gas		X
Roofers	X	
Helpers – Painters, Paperhangers, Plasterers, & Stucco Masons	X	
Misc. Construction & Related Workers	X	
Derrick Operators, Oil & Gas		X
Construction Laborers	X	
Paving, Surfacing, & Tamping Equipment Operators	X	
Helpers – Construction Trades, All Other	X	
Hazardous Materials Removal Workers		X
Earth Drillers, Except Oil & Gas		X
Helpers – Pipelayers, Plumbers, Pipefitters, & Steamfitters	X	
Fence Erectors	X	
Plasterers & Stucco Masons	X	

Helpers – Brickmasons, Blockmasons, Stonemasons, & Tile & Marble Setters	X	
Floor Sanders & Finishers	X	
Helpers – Extraction Workers	X	
Helpers – Carpenters	X	

\*Note: Jobs listed here have faster than average, or much faster than average projected growth, compared to all other jobs in the U.S. economy.

**FIGURE A3: COLORADO DEMOGRAPHIC PROFILES, SELECTED HIGH-GROWTH CONSTRUCTION AND EXTRACTION JOBS\***

Occupation	2017 Median Wages	White	Black	Latino	Male
Elevator Installers & Repairers	\$78,862	70%	30%	0%	100%
Supervisors of Construction & Extraction Workers	\$66,487	90%	1.1%	24%	96%
Construction & Building Inspectors	\$60,891	86%	0%	60%	95%
Rotary Drill Operators, Oil & Gas	\$56,614	90%	1.5%	31%	100%
Plumbers, Pipefitters, & Steamfitters	\$51,090	87%	1.4%	33%	97%
Derrick Operators, Oil & Gas	\$50,127	90%	1.5%	31%	100%
Operating Engineers & Other Const. Equip. Operators	\$48,333	88%	1.4%	24%	99%
Earth Drillers, Except Oil & Gas	\$47,807	85%	0%	31%	87%
Structural Iron & Steel Workers	\$46,825	84%	0%	19%	90%
Cement Masons & Concrete Finishers	\$42,072	91%	0%	79%	99%
Hazardous Materials Removal Workers	\$42,811	92%	3.5	46%	77%
Glaziers	\$41,714	89%	7.6	28%	99%
Paving, Surfacing, & Tamping Equipment Operators	\$41,477	100%	0%	76%	100%
Roofers	\$38,873	84%	4.8%	66%	98%
Construction Laborers	\$34,848	84%	2.6%	49%	97%
Plasterers & Stucco Masons	\$34,613	81%	0%	76%	100%
Fence Erectors	\$34,261	79%	0%	31%	100%
Stonemasons	\$33,970	89%	1.7%	52%	100%
Helpers – Construction Trades, All Other	\$30,715	86%	0%	60%	95%

\*Note: Jobs listed here are high-growth jobs for which Colorado-specific demographic data were available in the IPUMS data, IPUMS-USA, University of Minnesota, [www.ipums.org](http://www.ipums.org). Persons whose ethnicity is identified as Hispanic or Latino may be of any race.

## Appendix B: List of Jobs Used for Figures 7-9

### **TWO-ADULT HOUSEHOLDS**

#### **Two adults, three children, one adult working**

**Lower Middle Income (LMI):** Elevator Installers and Repairers  
Supervisors of Construction and Extraction Workers  
Construction and Building Inspectors  
Rotary Drill Operators, Oil and Gas

**Middle Income (MI):** None

**Upper Middle Income (UMI):** None

#### **Two adults, three children, two adults working**

**LMI:** Misc. Construction and Related Workers  
Roofers  
Floor Sanders and Finishers  
Stonemasons  
Helpers – Painters, Paperhangers, Plasterers, and Stucco Masons  
Helpers – Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters  
Construction Laborers  
Helpers – Construction Trades, All Other  
Helpers – Extraction Workers  
Fence Erectors  
Plasterers and Stucco Masons  
Helpers – Pipelayers, Plumbers, Pipefitters, and Steamfitters  
Helpers – Carpenters

**MI:** Elevator Installers and Repairers

Supervisors of Construction and Workers  
Plumbers, Pipefitters, and Steamfitters  
Brickmasons and Blockmasons  
Extraction Workers, All Other  
Structural Iron and Steel Workers  
Derrick Operators, Oil and Gas  
Operating Engineers and Other Construction Equipment Operators  
Earth Drillers, Oil and Gas  
Septic Tank Servicers and Sewer Pipe Cleaners  
Pipelayers  
Roustabouts, Oil and Gas  
Tile and Marble Setters  
Cement Masons and Concrete Finishers  
Hazardous Materials Removal Workers  
Paving, Surfacing, and Tamping Equipment Operators  
**UMI:** Elevator Installers and Repairers

**Two adults, two children, one adult working**

**LMI:** Elevator Installers and Repairers  
**MI:** None  
**UMI:** None

**Two adults, two children, two adults working**

**LMI:** Service Unit Operators, Oil, Gas, and Mining  
Reinforcing Iron and Rebar Workers  
Plumbers, Pipefitters, and Steamfitters  
Extraction Workers, All Other  
Structural Iron and Steel Workers  
Derrick Operators, Oil and Gas  
Operating Engineers and Other Construction Equipment Operators  
Earth Drillers, Oil and Gas  
Septic Tank Servicers and Sewer Pipe Cleaners  
Pipelayers  
Roustabouts, Oil and Gas  
Tile and Marble Setters  
Hazardous Materials Removal Workers  
Paving, Surfacing, and Tamping Equipment Operators  
Misc. Construction and Related Workers  
Roofers  
Floor Sanders and Finishers  
Helpers – Painters, Paperhangers, Plasterers, and Stucco Masons  
Helpers – Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters  
Helpers – Extraction Workers  
**MI:** Elevator Installers and Repairers  
Supervisors of Construction and Extraction Workers  
Construction and Building Inspectors  
Rotary Drill Operators, Oil and Gas  
Brickmasons and Blockmasons  
**UMI:** None

**Two adults, one child, one adult working**

**LMI:** Elevator Installers and Repairers  
Supervisors of Construction and Extraction Workers  
**MI:** None  
**UMI:** None

**Two adults, one child, two adults working**

**LMI:** Elevator Installers and Repairers  
Supervisors of Construction and Extraction Workers  
Construction and Building Inspectors  
Rotary Drill Operators, Oil and Gas  
Reinforcing Iron and Rebar Workers  
Plumbers, Pipefitters, and Steamfitters

Brickmasons and Blockmasons  
 Derrick Operators, Oil and Gas  
 Operating Engineers and Other Construction Equipment Operators  
 Earth Drillers, Oil and Gas

**MI:** Supervisors of Construction and Extraction Workers  
 Construction and Building Inspectors  
 Rotary Drill Operators, Oil and Gas  
 Reinforcing Iron and Rebar Workers  
 Plumbers, Pipefitters, and Steamfitters  
 Brickmasons and Blockmasons  
 Derrick Operators, Oil and Gas  
 Operating Engineers and Other Construction Equipment Operators  
 Earth Drillers, Oil and Gas

**UMI:** Elevator Installers and Repairers

***SINGLE-PARENT HOUSEHOLDS***

**One adult, two children**

**LMI:** Elevator Installers and Repairers  
 Supervisors of Construction and Extraction Workers  
 Construction and Building Inspectors  
 Rotary Drill Operators, Oil and Gas  
 Service Unit Operators, Oil, Gas, and Mining  
 Reinforcing Iron and Rebar Workers  
 Plumbers, Pipefitters, and Steamfitters  
 Brickmasons and Blockmasons  
 Derrick Operators, Oil and Gas

**MI:** None

**UMI:** None

**One adult, one child**

**LMI:** Stonemasons  
 Construction Laborers  
 Helpers – Construction Trades, All Other  
 Fence Erectors  
 Plasterers and Stucco Masons  
 Helpers – Pipelayers, Plumbers, Pipefitters, and Steamfitters  
 Helpers – Carpenters

**MI:** Rotary Drill Operators, Oil and Gas  
 Service Unit Operators, Oil, Gas, and Mining  
 Reinforcing Iron and Rebar Workers  
 Plumbers, Pipefitters, and Steamfitters  
 Brickmasons and Blockmasons  
 Extraction Workers, All Other  
 Structural Iron and Steel Workers  
 Derrick Operators, Oil and Gas  
 Operating Engineers and Other Construction Equipment Operators  
 Earth Drillers, Oil and Gas  
 Septic Tank Servicers and Sewer Pipe Cleaners  
 Pipelayers  
 Roustabouts, Oil and Gas  
 Tile and Marble Setters  
 Cement Masons and Concrete Finishers  
 Hazardous Materials Removal Workers  
 Paving, Surfacing, and Tamping Equipment Operators  
 Misc. Construction and Related Workers  
 Roofers  
 Floor Sanders and Finishers  
 Helpers – Painters, Paperhangers, Plasterers, and Stucco Masons  
 Helpers – Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters  
 Helpers – Extraction Workers

**UMI:** Elevator Installers and Repairers  
 Supervisors of Construction and Extraction Workers  
 Construction and Building Inspectors

## **CHILDLESS HOUSEHOLDS**

### **Two adults, zero children, one adult working**

**LMI:** Elevator Installers and Repairers  
Supervisors of Construction and Extraction Workers  
Construction and Building Inspectors  
Rotary Drill Operators, Oil and Gas  
Reinforcing Iron and Rebar Workers  
Plumbers, Pipefitters, and Steamfitters  
Brickmasons and Blockmasons  
Derrick Operators, Oil and Gas

**MI:** Elevator Installers and Repairers

**UMI:** None

### **Two adults, zero children, two adults working**

**LMI:** Stonemasons  
Helpers – Painters, Paperhangers, Plasterers, and Stucco Masons  
Helpers – Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters  
Construction Laborers  
Helpers – Construction Trades, All Other  
Helpers – Extraction Workers  
Fence Erectors  
Plasterers and Stucco Masons  
Helpers – Pipelayers, Plumbers, Pipefitters, and Steamfitters  
Helpers – Carpenters

**MI:** Construction and Building Inspectors  
Rotary Drill Operators, Oil and Gas  
Service Unit Operators, Oil, Gas, and Mining  
Reinforcing Iron and Rebar Workers  
Plumbers, Pipefitters, and Steamfitters  
Brickmasons and Blockmasons  
Extraction Workers, All Other  
Structural Iron and Steel Workers  
Derrick Operators, Oil and Gas  
Operating Engineers and Other Construction Equipment Operators  
Earth Drillers, Oil and Gas  
Septic Tank Servicers and Sewer Pipe Cleaners  
Pipelayers  
Roustabouts, Oil and Gas  
Tile and Marble Setters  
Cement Masons and Concrete Finishers  
Hazardous Materials Removal Workers  
Paving, Surfacing, and Tamping Equipment Operators  
Misc. Construction and Related Workers  
Roofers  
Floor Sanders and Finishers

**UMI:** Elevator Installers and Repairers  
Supervisors of Construction and Extraction Workers

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<sup>i</sup> Lower middle income is defined as the range from two-thirds of the median income to the median income; middle income is defined as the range from the median income to 1.66 times the median income; and upper middle income is defined as the range from 1.66 to two times the median income.

<sup>ii</sup> Note that this approach is not intended to guarantee what jobs will pay a wage high enough to get into the middle class, only which jobs in the construction and extraction industries pay wages that align with upper-middle, middle, and lower-middle incomes, for different family types.

<sup>iii</sup> This budget includes items such as housing, health care, automobile ownership, retirement savings, college savings, and vacation.

<sup>iv</sup> Occupations in these industries are labeled 47-xxxx in the BLS data

<sup>v</sup> See Figure A2 in Appendix A for these high-growth jobs.