

Employment Opportunities Increasing In 2019 For Engineers And Architects

■ By **PIERCE NAHIGYAN**
 STAFF WRITER

High demand for professional workers and technological innovation have created a strong job market for those in the engineering and architectural fields.

“It’s an interesting time,” Sandra L. Bouckley, interim CEO and executive director of the Society of Manufacturing Engineers (SME), told the Business Journal. In addition to what Bouckley called “old school” mechanical engineering, the industry now encompasses multiple specialties, including mechatronics, robotics and biomedical.

“We’re transitioning from the manual, unskilled labor kinds of jobs . . . to a lot higher skilled kinds of jobs,” Bouckley said. She used automobile manufacturing as an example. While the job of assembling a car is now a robotic endeavor, there are now engineering jobs for programming that robot, maintaining the robot and writing the software that controls the robot.

While Bouckley pointed to the plethora of “high tech” jobs available in California, she characterized the entire United States as having “a good job market” right now. According to the U.S. Bureau of Labor Statistics, occupations in the highest demand in the architectural and engineering fields include industrial engineers, surveyors, marine engineers and naval architects, and environmental engineering technicians. Employment in all of these jobs are projected to grow faster than average between 2016 and 2026. Jobs in petroleum engineering are projected to grow at 15%, much faster than average.

In her 2019 outlook for construction and engineering, Deloitte Consulting Principal Michelle Meisels reported that mergers and acquisitions for the industry are positioned for a strong year ahead, following an active 2018 that saw 344 deals with a total value of more than \$20 billion. “Driving this activity are the proliferation of mega projects infused with advanced technologies, a focus on smart cities, and the promises of a data-driven world,” she wrote.

Robert Ivy, executive vice president and chief financial officer of the American Institute of Architects (AIA), told the Business Journal that that business conditions at architecture firms are extremely strong entering 2019. “AIA’s Architecture Billings Index showed billings rose steadily in 2018 and new project activity grew even faster,” he said. Furthermore, U.S. firms added about 8,000 payroll positions over the past year, which outstripped the 6,500 persons who graduated from accredited U.S. architecture schools in 2018. “Staffing has become a major issue for the profession,” Ivy said.

Many architectural firms are looking at design opportunities beyond U.S. borders, he went on, as the U.S. accounts for only about 12% of global construction activity. “However, there is growing concern over an economic slowdown – both domestically and internationally – which would limit activity in the residential as well as nonresidential building sectors,” Ivy said.

Bouckley was more optimistic on the engineering industry’s prospects in 2019. “If you’re a kid coming out of college now, you can pick where you want to be and you’re going to find opportunities anywhere across the country,” she said.

Alan Burks

President & Director of Architecture, Environ Architecture

While architecture surrounds us, we tend to ignore it, until we consider that architecture builds for our needs at home, work, and play atop ever-shifting foundations. For instance, California faces a new Building Code in 2020 along with tariff-driven increases in construction costs, worldwide awareness of climate change, and looming environmental and social issues. These challenges require solutions that include nimble imaginations, forward thinking, and courageous conversations among architects, their communities, and policymakers.

Decreases in housing affordability and increases in structural unemployment contribute to epidemic homelessness across the nation even during a period of prosperity. However, we foresee a slowing economy.

Retail bankruptcies have created unwieldy urban and suburban vacancies. We must find ways to repurpose these cavernous buildings into workplaces, transitional living, or schools. We should begin to think of housing as “infrastructure” that fuels our economy. This repositioning involves cultural challenges, but it is possible.

Urban livability, sustainability, and mobility will take center stage in 2019 as we realize that quality of life and harmony with the environment are as essential as profits. We predict fewer new developments than last year, but we will have plenty of work to do: Architects collaborating with policymakers assures a sustainable future.

Jeff Jeannette

Founder, Lead Architect, Jeannette Architects

The last several years have seen strength in the housing market. In 2019, residential home prices are forecasted to be somewhat flat and buyer activity is expected to be similar to that of 2018, according to local industry professionals. Currently, mortgage rates are hovering in the low 4% range and may reach 5% in 2019. As consumers step back from the housing market, home prices tend to reduce, though we’re not expecting to see a significant decline in 2019 as our economy remains stable. Tax bases are reassessed upon the purchase of a home. We’re seeing more homeowners remodeling and enlarging their homes, rather than moving and buying new.

Design trends include enlarging kitchens, expanding common spaces, master & secondary bedroom additions, second floor additions, blurring lines between outdoor and indoor living spaces, and energy efficient design, all with a focus on a healthy home environment. At Jeannette Architects, we’re expecting a slight increase in project count and scope compared to 2018 with more medium and large-scale remodel and new home requests. Hiring a licensed architect can help you achieve the most out of your budget and is the best way to assure a sound and profitable investment.

Lance Kenyon

Partner, MHP, Inc.



As with most firms in the architecture and engineering fields, MHP has experienced tremendous growth over the past five years. However, we anticipate some sectors may slow in 2019, while others remain strong. New projects in the private sector are certainly affected by the economy, and recent losses in the stock market and concerns that housing prices and rents have peaked may reduce the number of future projects in this area.

In education, both K-12 and higher education, we anticipate a flat to moderately strong 2019. While the economy may slow, school districts have passed bonds for facility improvements and colleges are growing to meet increased enrollments.

One area that may remain strong is seismic strengthening of existing buildings. January 17th is the 25th anniversary of the Northridge earthquake – the last significant earthquake in the United States. While much of the public sector implemented seismic risk reduction programs many years ago, private and commercial buildings have largely not been addressed. In the past few years, numerous cities have passed mandatory ordinances requiring evaluation of certain types of buildings with known vulnerabilities. These programs are a very important step in reducing safety hazards and increasing the resiliency of our cities.

Julio Nuno

Senior Vice President, SCS Engineers



Following an outstanding 2018, the outlook for the engineering sector looks like it will continue to be good. Business has been robust for the past few years, driven by a strong economy, growth in construction and various infrastructure improvement projects. However, the growth that we have seen for several years is expected to slow in 2019. Engineering News-Record reports that construction starts in 2019 will show no change and will begin to see a softening in the housing market, but an increase in the industrial construction sector and institutional building. Positive trends are also expected for infrastructure, highway and bridge, and wastewater treatment projects.

Although there are some disciplines that may not be as positive, the engineering practice is currently strong and will likely continue through the first half of 2019. In general, forecasters believe that the economy in 2019 will continue to be good, but may slow down in the latter half of the year.

With our foundation in solid waste engineering and environmental consulting, the outlook for SCS Engineers is similarly optimistic. Our solid waste and environmental services practices continue to remain strong and we have a good backlog for 2019. Our real estate business should remain robust as long as the economy continues on its current track. With additional regulations and requirements affecting our stormwater, greenhouse gas, and clean water practices, we expect growth in these business areas.

Kevin Peterson

President & CEO, P2S, Inc.



The outlook in the California engineering market continues to look strong as we enter 2019, although I expect to see a dampening of our growth rate experienced over the past four years. I have some concern regarding the staying power of the U.S. economy and the ever-tightening market for qualified engineers. After experiencing a 6% increase in number of opportunities and a 13% increase in the value of those opportunities in the first half of 2018, P2S saw a 9% decrease in the number of opportunities and a 3% increase in the value of those opportunities in the second half of 2018.

Our industry saw a significant increase in young people leaving the engineering profession from 2008 to 2012 with the last recession. Experienced engineering labor has been difficult to find especially with low unemployment. We have been hiring predominately new graduates and engineers with two to four years of experience and investing more in training to support our growth. ■

Despite Equity Market Volatility, Financial Services Experts Optimistic About 2019

■ By **ALENA MASCHKE**

STAFF WRITER

After a year marked by trade disputes and market volatility, experts in the financial services sector are urging consumers not to panic or lose hope in the industry and the strength of the national economy in 2019. “We are cautiously optimistic for the U.S. economy in 2019 because consumer confidence is high and there is the historically low unemployment rate of 3.9%,” Jack Ferry, vice president of communications at the American Financial Services Association, told the Business Journal via e-mail.

Ferry said association members, most of whom deal in traditional installment lending companies and automotive finance companies, were reassured by a slight increase in sales of new cars and light trucks. “An anticipated slump in the vehicle sales did not materialize in 2018 as sales of new cars and light trucks held steady,” Ferry said. “This is one economic indicator that reflects consumer confidence in the U.S. economy.”

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