



Market and Main, a TFMoran project, in Bedford.

Engineering Firms Navigate Changing Economy

BY MELANIE PLEND

Engineers of all stripes seem to have just one word to describe the outlook for 2019 and beyond: cautious.

“Well, I think we feel that 2019 will be very similar to 2018,” says Matthew J. Low, senior vice president of Hoyle, Tanner & Associates, located in Manchester and Portsmouth. “In a lot of ways we’re not seeing a big upswing in potential projects, but we’re also not seeing a downswing. I think it feels like it’s going to be relatively status quo. ... Though I wouldn’t call it completely bullish. I would say cautious. Cautious growth.”

Whether it is workforce shortages, skepticism over federal infrastructure dollars com-

ing into the market sometime soon, or rumors of a possible recession at the end of 2019, engineers in NH seem to be hoping for the best, but cautiously planning for the worst.

The economy still seems to be going strong, which is encouraging to Fuss & O’Neill’s CEO Kevin Grigg. The firm, with roughly 350 employees and offices in Manchester and every state in New England, as well as a satellite in California, says its corner of the market—which includes community development, environmental work, water resources and treatment, transportation and utilities—has been fairly robust for the past few years.

“And that’s largely because the economy has turned around and obviously that af-

fects us both on the public and private sides of our business,” Grigg says. “Although, perhaps the rebound has been more robust on the private side.”

Sanborn, Head & Associates, an engineering and technical consulting firm headquartered in Concord with offices in Massachusetts, Vermont and Colorado serves primarily the industrial, solid waste, development and energy sectors and grew revenue 10 percent and staff by 8 percent in 2018. The firm opened its Denver office last year. Barret Cole, president and COO, says the firm is forecasting revenue growth of 10 to 15 percent in 2019.

“December shook things up, and people became cautious again” due to the volatility

in the stock market, Cole says. "There are a lot of people out there expecting the next economic slowdown because we've been in a period of expansion for so long. Any little signal of a downturn causes people to pause." The government shutdown also did not help, he says, as it delayed project starts. However, Cole says business is picking up again and back on track for the firm's forecasted growth.

Small Retail Sector Is Strong

Robert Duval, president of TFMoran in Bedford, echoes this sentiment, saying that they've seen growth in retail and commercial markets. While firms are not seeing construction of big-box stores like they were several years ago, they are seeing an uptick in mixed-use and small retail.

Duval points to one of TFMoran's projects, Market and Main in Bedford, as an example. "[Market and Main] is indicative of moving toward more mixed-use centers," Duval says. "Whereas maybe 10 years ago or so, it would've been strictly a retail development. Now, it's a combination of retail and commercial hospitality.

And that's not relegated to just the southern part of the state. Jon L. Warzocha, CEO of Horizons Engineering in Littleton, the largest engineering firm in the state north of Laconia, says they too are seeing growth in the retail sector. Warzocha says that while much of what drove their business before the Great Recession was real estate development, that has since dried up and the firm has seen a dramatic shift to retail and hospitality projects.

"We've certainly seen some strengths in the recreational field, which drives a lot of that commercial activity in our service area," Warzocha says. "We completed a lot of resort related work."

Energy Is a Bright Spot

Other areas of steady growth have been in the utilities and municipal sectors, Warzocha says. Municipalities are investing

in infrastructure, particularly in water and wastewater projects, he says.

Wendell "Wally" Shedd, senior associate and Northeast Federal Sector lead for Terracon in Manchester, a national engineering consultant that also does technical, environmental and construction materials engineering, says the firm has been doing a considerable amount of work on solar and energy projects. Shedd says this includes larger-scale solar projects being built in northern New England as utility companies upgrade and improve their infrastructure to incorporate wind and solar inputs into the grid. "We don't anticipate that changing at least in the near term," Shedd says.

Sanborn, Head & Associates is also seeing growth in its energy practice, particularly natural gas infrastructure work, Cole says.

this work that's supported by government funding," says Warzocha.

Grigg of Fuss & O'Neill says government agencies are underfunded since the last national infrastructure bill expired in November 2009. Since then, he says, officials have relied on continuances and stopgap programs to provide even a minimal amount of funding for repairing roads and bridges.

Grigg notes that there is no shortage of roads and bridges in need of repair, but the funding for such projects is not keeping up with the need. "Because of this relative lack of federal funding, a lot of state governments that rely on the federal government for funding, particularly for larger projects, have either had to find other ways to fund their projects—primarily to bonding—or they've deferred a lot of those projects," he says.

Sanborn, Head & Associates saw an in-

terruption in some of the Superfund remediation projects it works on when the federal government shut down. Cole says that was less about funding and more about not having access to federal officials to approve the next phase of projects. With the federal government back to work, "that seems to be flowing again," he says.

Workforce Shortage

Low of Hoyle, Tanner & Associates says even if there is a large injection of new federal funding, their industry as a whole would actually be facing a bigger problem—a shortage of engineers. "It's already an issue," he says.

Grigg and Low say their firms are looking for ways to recruit and retain new talent. Hoyle, Tanner & Associates started an internship program that immerses college students in the firm's work and culture so they will want to stay as employees after they graduate. "It used to be that you'd hear, 'Oh, I need somebody with experience' or 'I need someone who can hit the ground running,'" Low says. "We've tried to break that mantra here by saying, well, that person doesn't exist, so we're going to build our own."



Horizons Engineering in Littleton provided the infrastructure utility work and site plans, as well as secured state, local and federal permits for an eight-person gondola being constructed at Bretton Woods Resort.

Funding Concerns

Many of the engineers interviewed think that there will be an uptick in transportation projects in the near future, especially as projects like the widening of I-93 start to wind down. Shedd says that may free up money for other projects.

However, this will depend on the availability of federal and state funding for infrastructure projects. "I think there is a relatively high degree of uncertainty as to both the economy and the future of



COURTESY OF FUSS & O'NEILL

Fuss & O'Neill provided civil engineering and site development services for a new three-level parking structure on the main Elliot Hospital campus in Manchester.

Low says they started their internship program in 2015 and most of those interns have been hired. They plan on continuing that program this summer as well.

Cole of Sanborn, Head & Associates says the low unemployment rate makes it more challenging to recruit engineers and scientists, so the firm has focused on strengthening its employee engagement programs for years, which is helping it to attract and retain talent. Three years ago it launched EDGE—Engagement, Development, Guidance and Empowerment—a program aimed at enhancing its culture.

That included getting rid of its traditional annual job performance reviews, which looked backward, and instituting monthly check-ins, which focus on employee development and helping them achieve career goals moving forward. “We believe if employees are growing in their careers, the company will grow as well. Rather than focus on the growth of the company, we treat growth as an outcome,” Cole says.

Strength in Diversification

Many of these firms also see themselves in a good position even if an economic downturn were to occur this year. Since the last recession, many have found ways to

diversify, find niche markets and even join forces with other firms.

“We are creating some strategic alliances with some other small outfits that complement what we do,” Low says, explaining that they sign memorandums of agreement to pursue certain types of projects or markets together without poaching clients from one another. Low says such agreements are not new in the field, but they do create a protection plan for businesses.

Still other firms, such as Horizons Engineering, are adding services such as utility location to complement the surveying work they already offer. “We’ve added that in with our environmental sciences group,” Warzocha says, adding that it expands their capability to be a one-stop shop. “It’s just one more thing we can use to diversify,” he says. “It is very difficult to predict where things are headed.”

Fuss & O'Neill is tapping underserved but growing markets. “One market that we’ve seen a fair amount of growth in has been the medicinal marijuana market,” Grigg says. He explains that the firm is honing its knowledge and skills in this area. There is increased interest in projects that allow the growth of healthier sustainable crops on an industrial scale, he says,

including major grocery chains that want to grow produce on-site. “Some of the expertise that we’ve gained in these sorts of [projects] has carried itself over into some work that we’ve been doing in the medicinal marijuana market,” he says. Grigg points out that this is a risky bet but with so many states approving marijuana to varying degrees, he says it’s a hard market to overlook.

“[Medicinal marijuana] has been shown to provide people with various kinds of relief, whether it’s pain or anxiety or whatever they happen to be dealing with,” Grigg says. “I think of our services as being a value to society. With that in mind, it’s a pretty hard market both ethically and financially to ignore.”

Sanborn, Head & Associates is experiencing growth tackling emerging contaminants, such as per- and polyfluoroalkyls, man-made chemicals used for decades to manufacture household and commercial products. Recently, these have been the center of controversy over contamination of NH’s drinking water. The firm is doing work across the country to identify such contaminants and evaluate remediation options. “We want to see the science drive the policy,” Cole says. ■