Non-Traditional Career Paths for Structural Engineers

By Brian Quinn, P.E.

“I really like being a structural engineer, but I do not like many of the tasks associated with the design and construction of projects.” This is a comment I have heard many times from structural engineers who express feeling like a “square peg in a round hole” as a design engineer.

We do not want to lose good people from our profession who have an enthusiasm for structural engineering, but who do not enjoy the more conventional career paths as a structural engineer. Many people who experience this frustration end up switching to another industry unrelated to structural engineering, and we lose talented people. The good news is that there are many “non-traditional” career paths available for someone facing this challenge that allow them to utilize their structural engineering background and contribute to the profession in unique ways.

Hopefully, sharing my own story provides some additional background. After finishing my MSCE from Purdue in 1991, I was fortunate to find a job with an excellent small consulting structural firm in West Michigan. The three owners of the firm were great mentors. I was able to work on a wide variety of projects, learn an incredible amount about structural engineering, get involved in client meetings, and was given a lot of responsibility. This company was an excellent place to learn as a structural engineer. Yet, something was missing for me in terms of fulfillment.

After struggling with what to do, I was able to find a unique position with the structural engineering software company RAM in 1995 (now a part of Bentley®). My role was primarily sales but included technical support and training. I loved using technology related to structural engineering, so this was an excellent position for me, with a great company. It also allowed me to meet a wide range of structural engineers across the country. Also, I was able to get more involved in the structural engineering profession, including being President for the Structural Engineers Association of MI (SEAmI).

After twelve great years with RAM, I felt pulled to help structural engineers in another unique way. I started SE Solutions in late 2006 to help match excellent structural engineers with great companies and unique opportunities so they could find a fulfilling career path and stay in the structural engineering industry.

Fast forward to today, and we have seen many ways that structural engineers can make a positive contribution to our profession in non-traditional roles. The “technical” level of these positions can vary significantly, as well as the function of the role. An example of a few possibilities would include:

• Helping structural engineers utilize seismic dampers or special seismic connections
• Helping trade associations expand their message and outreach in multiple different roles
• Helping software companies in sales, training, technical support, or development
• Helping companies who make a unique engineered product (roller coasters, ropes courses, stadium bleachers, rack systems, conveyors, to name a few)
• Helping investigate the cause/origin of problems (forensic engineering)
• Helping building owners or general contractors in the construction, oversight, and maintenance of facilities

So, what are some of the things you can do if you are struggling to find fulfillment as a design engineer?

I would recommend seeking out other structural engineers who are in “non-traditional” roles and ask them how they came to do what they are doing. Some approaches include:

• Talking to people who come into your office to provide lunch-and-learns
• Talking to exhibitors at structural engineering conferences
• Using resources like LinkedIn to search for structural engineers doing unique things
• Asking family and friends what they see as your strongest traits and skills

Structural engineering is a wonderful profession, offering a variety of career paths that can provide a fulfilling career. While the majority of people will enjoy more “traditional” roles, there are multiple other possibilities for those looking for a unique way to still be a part of the structural engineering industry.

Brian Quinn is the Founder and President of SE Solutions, LLC, based in Holland, MI. (brian.quinn@findyourengineer.com)