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When I was little I wanted to be a veterinarian or maybe study agriculture. Growing up on a farm, I was exposed to these industries in my home life and had never heard of an engineer. In high school I took the required Principles of Engineering Design class and learned a bit of coding and constructed a bridge made out of popsicle sticks. It was not until I was applying to colleges that I sat down with my mom to review the list of potential majors and she suggested that I consider engineering. The application of science and math appealed to me and I quickly learned that there were many different kinds of engineering to choose from. In college I reviewed the list of courses for each engineering discipline and settled on civil engineering because of the variety of specialties and its relevance to the built world around us. It was not until later into my undergraduate career that I discovered the specific field of structural engineering and what that looked like as a career.

As a young adult just starting my career, I am eager and proud to share my job title when asked the question what I do for work? Almost always after I give my title the follow up question is “so you build bridges?” I love using these opportunities to explain in simple terms what my day to day looks like, how this profession interacts with others, and the service that structural engineers provide. Most people do not realize the years of planning, designs, coordination, approvals, and construction labor that go into the buildings they see and use each day. Unconsciously, individuals trust that the building they enter will not collapse, but they do not realize the calculations that were performed to ensure that the building is safe and will withstand the natural elements like snow, wind, and earthquakes. People can appreciate the beauty of a city skyline but not wonder how those buildings are standing. I believe the biggest challenge surrounding public perception of structural engineers is the lack of recognition and awareness of the profession.

Appreciation of structural engineers needs to begin with the younger generation. Kids need to be introduced to the idea of it as a job for when they grow up. This can be difficult when children do not regularly interact with structural engineers as they might with other public professions. It is critical that structural engineering firms and organizations participate in outreach programs, such as Introduce a Girl to Engineering Day and STEM Day, and share what they do with children. A hands-on activity or a cool fact might be what a youth remembers about structural engineering when they are applying to college and thinking about their future career.

Structural engineering needs more exposure in mainstream media and the material that children consume. A few months ago I was reading a novel and it revealed that the character had planned to be a structural engineer. The other character’s response, which would be probable in real life, was that they did not know that was a job until that very moment. I could not believe I had seen structural engineer mentioned in a novel. I was so incredibly excited and hopeful that if others read the book and had the same response as the character that they would research a structural engineer. It was also disappointing to realize that this was the first time I had seen structural engineer cited in a book, movie or television show. A colleague recently shared a Chick-fil-a

kids book called “I Want to Be an Engineer” which is significant in promoting engineers to the restaurant’s young consumers and their parents. It would be remarkable to see structural engineers mentioned more often in educational materials and media to the degree that it was a common job mentioned when children are asked what they want to be when they grow up.

It is important to disclose to the public, in conversations with friends and strangers, the licensure process of a structural engineer. Society as a whole is more familiar with professions such as a doctor or a lawyer and might have some understanding of the schooling and exams required to practice these occupations. Relating structural engineering to these common careers can be helpful for people to grasp the complexity and difficulty of structural engineering. This can promote recognition and respect of the structural engineering profession. Social media can be an excellent platform to share accomplishments and experiences about our profession and elicit conversations to teach others about the job.

I am optimistic that through outreach, exposure in common media and social media, as well as individual discussions with family, friends and strangers, structural engineers can begin to increase the general public’s awareness of the industry. It is not enough to enrich society with our structures, we must also promote the profession and encourage others’ interest in structural engineering so that it can continue to flourish and advance in the future. I am hopeful that by the end of my career when I share with someone what I do for work they will think beyond “building bridges” and recognize the effort that make the structures they use every day possible.