

### 2023 Young Member Summit Scholarship

What is your opinion about the public's perception of structural engineers? Provide suggestions for how structural engineers might increase recognition and general public awareness of the profession.

#### **Enhancing Public Perception of Structural Engineers: Strategies for Increased Recognition and Awareness**

The field of structural engineering plays a critical role in shaping the modern world, ensuring the stability of schools, hospitals, bridges, and other vital infrastructure. More importantly, the safety of the people who use this infrastructure is in the hands of structural engineers. However, the public's perception of structural engineering often remains misunderstood or unnoticed. In this essay, I will discuss my opinion of the general public's perception of structural engineers and explore possible strategies to increase recognition and raise awareness of the profession.

In my opinion, the general public's perception of structural engineering is primarily characterized by a lack of understanding and exposure to the profession. I believe that this is due to the low visibility of structural engineers compared to other professions. Unlike doctors, lawyers, or even architects, structural engineers work predominantly behind the scenes. The public rarely sees the meticulous calculations, analysis, and problem-solving that goes into their work. A majority of the public only hears about or pay attention to the field of structural engineering when there is a structural failure. This perception, or lack thereof, leads to an underestimation of the vital role played by structural engineers in ensuring the safety and integrity of infrastructure.

I grew up in small-town Iowa where this perception is widely visible; many farmers put up barns and machine sheds by buying materials and constructing it themselves, without any sort of engineer input. While the diligence and hard work of these citizens is admirable, it is unsurprising that these self-engineered buildings are typically the ones making up the debris spread across fields when strong storms hit or collapsing under the weight of heavy snowfall. The safety of buildings and other structures everywhere could be enhanced by making the public more aware and knowledgeable about structural engineering field and the valuable services professionals provide. Additionally, countless dollars could be saved by building owners if all were to utilize structural engineering professionals to ensure their buildings are up to date on the latest building codes. Having properly engineered buildings would lower insurance premiums and result in less repair costs in the event of storm damage.

Structural engineers could (and should) try to increase their recognition and awareness from the general public. These are some possible initiatives that structural engineers could undertake:



1. **Education Programs:** Structural engineering firms and professionals should always engage in educational activities aimed at students such as career fairs and job shadows. Presentations and interactive activities could be organized to highlight the profession and its importance in society. I believe the general public's lack of understanding of the structural engineering profession is due to most having never learned or even heard about the profession from a young age. Collaborating with high schools and colleges to organize educational opportunities will generate an increase in knowledge and interest of the profession. Conferring with students is critical to expanding public awareness as well as growing the field of structural engineering.
2. **Social Media:** In 2023, over 70% of the United States' population uses some form of social media (Kemp, 2023). Simply put, information spreads like wildfire on the internet. Unfortunately, this means that misinformation is also easily spread and believed by many. Structural engineering firms and professionals should utilize social media platforms to spread knowledge and amplify the profession, as well as to keep misinformation about the profession at bay. Professionals can leverage various social media platforms to share their experiences, highlight projects, and provide insight into their work. This could be done through series of videos, blog posts, and infographics, explaining the importance of structural engineering in a visually engaging manner. By engaging with the online community, structural engineers could reach a wider audience and educate more of the public about their work and the value it holds in society.
3. **Public Engagement:** Structural engineering firms and professionals should frequently take part in public events, conferences, and seminars related to construction, architecture, and engineering. Engineering firms and professionals could also administer this by organizing open houses, public consultations, or guided tours of construction sites. Engaging the public in this manner would allow citizens to witness the careful thought and expertise that goes into structural design. Additionally, providing educational signage and interactive displays at project sites could explain the engineering concepts behind the structures, thus making them more accessible to the general public.
4. **Media Engagement:** Structural engineering firms and professionals should collaborate with media outlets to display their work and its impact on society. This could involve providing expert commentary and analysis on infrastructure-related issues and taking part in documentaries or interviews. Additionally, while numerous structural engineering related publications and awards currently exist, they remain mostly unknown to the general public. Engaging with media outlets to publicize these awards would enhance awareness and appreciation for the profession.

In conclusion, the public's limited knowledge and perception of structural engineering could be enhanced through efforts by professionals in the field. Actively engaging in educational programs, using social media platforms, providing public engagement opportunities, and collaborating with media outlets are just a few strategies that structural engineers could use to increase recognition and raise public awareness of their profession. A better understanding of the profession will lead to a more informed society, fostering a higher level of trust and credibility, ultimately leading to a safer and more resilient world.

## References

Kemp, S. (2023, February 9). *Digital 2023: The United States of America - DataReportal – global digital insights*. DataReportal. <https://datareportal.com/reports/digital-2023-united-states-of-america>