

Pandemic's Luck: SEI's Golden Moment Committing to an Equitable, Diverse, and Inclusive Profession

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Like many in this COVID moment, I have reflected on life, pre- and post-pandemic. I have come to realize that, were it not for the particularly brutal, televised killing of George Floyd at the hands of law enforcement, I would not be the Inaugural Chair of SEI's Diversity, Equity and Inclusion Committee. It was a personal and galvanizing call to action born out of my trauma that grew into a need also to be accountable as a professional.

Racial violence, specifically anti-Black racial violence, is not new to any of us. My education, two decades of exciting engineering consulting, and the relative privilege of being a researcher and professor have not shielded me from sensing "my uneasy queasies" that I could be harmed anytime I deploy to lead a post-tornado damage assessment survey. Despite professional accomplishments – locally, regionally, and internationally, despite supportive faculty, mentors, and colleagues, I and so many people of color live a part of George Floyd's terror every day as we navigate this world. The symbolism of 9 minutes and 29 seconds is as significant to structural engineers and society as is the galloping failure of the Tacoma Narrows Bridge. The domination and humiliation of Black men by the police cannot be set aside by us because we professionals are not above the fray.

ASCE articulated our societal responsibility in its Code of Ethics, as "**first and foremost**, (to) protect the health, safety, and welfare of the public," and that engineers shall "*recognize the diverse historical, social, and cultural needs of the community, and incorporate these considerations in their work.*" These noble words must be turned into actions. SEI has taken steps to improve our diversity and, alongside others, loudly condemned racism and committed to its eradication – a call for action. Four months after Mr. Floyd was killed, the SEI Board approved the Charter for the Diversity, Equity, and Inclusion Board-level Committee (DEI), and I agreed to serve as its Inaugural Chair. The committee is currently comprised of three members: Vice-Chair Dr. Sara Wadia-Fascetti, Dr. Malcolm Ammons, and I. This is a worthy beginning.

The Diversity, Equity + Inclusion Committee Charge

The charge and challenge of the DEI Committee is to advance the structural engineering profession by promoting the adoption of these values into the business, the practice, and the education of structural engineers. Success will be measured by tangible and lasting modifications in how we educate, how and where we do business, how we recruit and mentor structural engineers, and ultimately in how structural engineering firms engage and practice within ALL communities. It is essential to act decisively as we adapt to rapidly changing social norms and cultural expectations in this post-pandemic moment. A more diverse engineering workforce is critical for assuring 21st-century business credibility and success.

Why a DEI Committee?

That said, as a profession, structural engineers still need to take concrete actions to confront the less pleasant parts of our historical legacy before we can move forward. Like many other professions, American civil engineers have enabled systemic racist practices through our work. Our 20th-century contributions in the design and construction of Whites-only suburban neighborhoods in the 1950s (e.g., the Levittown suburbs of NY, NJ, and PA), supported by Federal housing subsidies, remain a low point. Until Howard Grant became ASCE's first Black member in 1948, no credible voice could speak on behalf of Black society. At the height of America's post-World War II economic miracle, houses were supplied for the American middle class – but African Americans need not apply. Civil engineers also designed and built the highways that enabled the new suburban workers to drive rapidly to their downtown offices – without consideration for the social upheavals these highways wrought by the planned destruction of established

African American communities in the path of these superhighways, under the rhetoric of "urban renewal".

Our history is directly related to our present, and we need to acknowledge its impact upon who structural engineers are today. Today's reality is that 85% of structural engineers still work for firms with all-White or majority White leadership (2020 SE3 survey). The number of minority structural engineers is embarrassingly small (<1% Native American, 1.3% African American, 1.8% Middle Eastern or North African, 6% Hispanic, Latino or Latina, and 12% Asian). In my 17 years as a Professor of structural engineering at Tier I research universities, I have never taught any class that had more than 1 or 2 African American students. Rarely have I seen another Black Structural Engineer at our annual engineering conferences.

Call to Action

This is a call to action, a call to passion and commitment. No Committee can deliver change without our members' support, effort, and willingness to envision a more inclusive future. **We issue a distinctly different call, inviting the leaders of each committed structural engineering firm to nominate one member to join us and become the catalyst within your organizations.** Members will work together within the DEI Committee to **build the road** towards a welcoming, diverse, equitable, and inclusive structural engineering profession. We encourage all interested SEI members to step forward together with us on the DEI Committee. Apply at <https://bit.ly/2Rtc7tG>.



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