

Message from the BSCES President



Now Hiring

At regular intervals, I dedicate time to browse through my LinkedIn account, seeking updates from my professional network and others within our industry. However, over an extended period, it's become evident that my feed has been overwhelmingly filled with variations of the phrase

"Now Hiring," posted by different employers to attract potential candidates. This persistent theme reflects the current labor shortage and the consequent high demand for new hires in our field. In my 25-year tenure as a civil engineering consultant, I've never witnessed such a pronounced scarcity of workers.

Although the Covid-19 pandemic did temporarily disrupt projects for certain individuals, by late 2020, most of us in the industry were already amid a bustling workload and actively seeking additional assistance. This trend has only intensified since the approval of the Bipartisan Infrastructure Law (BIL) by Congress in November 2021—a landmark investment in our nation's infrastructure often characterized as a "once-in-a-generation" endeavor.

Expenditures linked to the BIL were anticipated to commence this year and extend until 2033, with funding reaching its peak around the years 2027 and 2028. An article featured in the May/June 2023 edition of the American Society of Civil Engineers (ASCE) Civil Engineering magazine included the following statement from former ASCE President Dennis Truax, PhD, PE: "The U.S. Bureau of Labor Statistics projects a need for about 25,000 new civil engineers each year throughout this decade. However, this number is based on the need to replace workers; it does little to consider the impact of the (IIJA) and civil engineers' roles in its implementation." The term "IIJA" refers to the Infrastructure Investment and Jobs Act, which is an alternate designation for the BIL.

This data prompts me to ponder about how the civil engineering sector will navigate these conditions in the coming decade. The shortage of adequate personnel coupled with the substantial workload has posed significant challenges, inevitably leading to busier and more demanding day-to-day routines. Nonetheless, amidst these challenges, it's easy to overlook the fact that this situation presents a highly advantageous opportunity for our profession—one that is poised to stimulate remarkable progress and innovation.

The *American Society of Civil Engineering* magazine details various reasons why civil engineering and many other professions are facing labor shortages and strategies for

employers to attract new hires. However, one important activity we must collectively improve upon over the next decade is our outreach to primary and secondary education students to promote engineering and combat the decline in those pursuing engineering curriculums and careers. The Boston Society of Civil Engineers has a Public Awareness and Outreach Committee that is responsible for planning and implementing educational outreach and our dedicated members consistently organize several great events and competitions each year! We hope to keep this up given its significance these days.

The Most Crucial Natural Resource (Besides Air!)

I am particularly enthusiastic about the current edition of the journal, which delves into articles centered around the Massachusetts Water Resources Authority (MWRA). Serving over 3.1 million individuals and more than 5,500 businesses across 61 communities in eastern and central Massachusetts, the MWRA is responsible for providing wholesale water and sewer services. Since its inception in 1985, the MWRA has invested upwards of \$6 billion in novel facilities. This commitment has yielded remarkable achievements, including transformative projects like the restoration of Boston Harbor through the construction of the Deer Island Wastewater Treatment Plant, as well as the establishment of the John J. Carroll Water Treatment Plant. The MWRA remains steadfast in its efforts to enhance and maintain the extensive network of water and sewer pipelines, along with numerous other critical facilities that underpin our access to drinking water and the disposal of wastewater.

In my capacity as a consulting project manager, I've had the privilege of collaborating with the MWRA on a range of intricate capital improvement projects. In doing so, I've had the opportunity to witness the unwavering dedication of its staff and the resolute commitment of its leadership to delivering water and sewer services of exceptional quality and reliability to the communities it serves.

Lastly, I extend my heartfelt gratitude to Dr. Gautham Das, the Editor-In-Chief of the Civil Engineering Practice, and the entire Editorial Board for their immense dedication and the countless hours they've dedicated as volunteers to produce this journal issue. It's your steadfast commitment that ensures the continued existence of this invaluable publication.

A handwritten signature in blue ink that reads "Michael Cunningham". The signature is fluid and cursive.

Michael Cunningham, PE,
BSCES President, 2023-2024