



WONDERSTRUCT

Columns | 5.8.24

Wonderstruct's quick digest of relevant news, products, and trends making a difference in buildings, power, and transportation. Pairs nicely with Beams, our blog, which is coming soon.

Outlook viewers - download external images for the full experience.



A Tragic Wake-Up Call: Reflecting on the Key Bridge Disaster

A Shocking Incident

On March 26, 2024, the quiet of the night was shattered when the Dali, a massive container ship, lost power and crashed into Baltimore's Francis Scott Key Bridge. The impact not only brought down a 1.6-mile steel structure into the Patapsco River in seconds, but also claimed the lives of six construction workers who were filling potholes on the bridge during an overnight shift.

Aging Infrastructure Woes

Now, this incident isn't just a one-off. It's a glaring sign of the troubles plaguing our country's infrastructure. A lot of the major systems we rely on were designed in the 1960s. And guess what? They're showing their age. The American Society of Civil Engineers graded our infrastructure a not-so-impressive C- in their [2021 report](#). They're talking about a \$2.6 trillion investment gap this decade alone. That's a quite hefty bill to foot.

Times, They Are A-Changin'

Let's talk about how much the world has changed since the Key Bridge was built in '77. Back then, cargo ships were tiny compared to the behemoths we have now. Today's ships are like floating cities that can carry [2,900 percent more cargo](#) than the first of its kind did back in 1956. And when you've got more mass, you've got more force. [One estimate](#) equated the force of the Dali hitting the Key Bridge to be up to 13 times the thrust of the Saturn V rocket.

Safety and Accountability

Here's where things get sticky. Were proper safety measures in place? Were regulations and protocols followed? These are questions we need answers to, especially if we want to prevent something like this from happening again.

You'd think four massive concrete barriers would prevent a collision, right? According to the National Transportation Safety Board (NTSB), these barriers, known as dolphins, got top marks for functionality in [May 2021](#). But they weren't enough to stop the Dali. As the NTSB digs deeper, they'll determine whether today's standards could have even made a difference. Maryland Transportation Secretary Paul J. Wiedefeld summed it up well when he told the [Washington Post](#), "The laws of physics are the laws of physics, right?"

Big Investments, Big Changes

It's not all doom and gloom. Ports all around the globe are stepping up to the plate, investing big bucks to accommodate these mammoth ships. Look at the [Panama Canal Expansion project](#), or the [Bayonne Bridge raise](#). Billions of dollars are being poured into making sure our ports can support the ocean's largest ships. And let's not forget the [Bipartisan Infrastructure Law](#), where Uncle Sam is throwing \$17 billion at port upgrades and waterways. It's a giant game of catch-up, but we're making strides.

So, here's the deal with rebuilding the Key Bridge—it's kind of up in the air right now. We're not exactly sure how much it's going to set us back, but some folks are basing estimates on what it cost to build New York's Gov. Mario M. Cuomo Bridge over the Hudson River. They're saying anywhere from [\\$1 to \\$5 billion](#) could be in the cards. We'll just have to wait and see how this one plays out.

The Human Side of the Story

Now we'd like to turn to the people affected by this tragedy. The six victims, Maynor Suazo Sandoval, Dorlian Castillo Cabrera, Alejandro Hernandez Fuentes, Carlos Daniel Hernández, Miguel Luna and José López were all non-union immigrants from Central America. They'd been putting in the hours for Brawner Builders out of Hunt Valley, Maryland, for years. Here's the twist: Jeffrey Pritzker, Brawner Builders' executive vice president, says they [don't hire undocumented immigrants](#). But Sandoval's nephew told the media that his uncle was undocumented. It's a messy situation, and it shines a light on a bigger issue.

According to the [2022 American Community Survey](#), almost a quarter of construction workers that year were immigrants. And the [National Association of Home Builders \(NAHB\)](#) thinks it might be even higher, around 30 percent. That's a huge chunk of the workforce. And here's the kicker—construction jobs are dangerous. Construction has one of the [highest work fatality rates](#) among occupations in the U.S. The Bureau of Labor Statistics tells us that in 2021, Hispanic or Latino workers, many of whom work in construction, made up [14 percent of all work-related deaths](#). It's a sobering statistic.

Just listen to what Baltimore construction worker Marcos Granos [told NPR after the collapse](#): "We go out to work, and sometimes we don't know if we're going to return home or not." That hits hard, doesn't it? Because it's true. These workers put their lives on the line every day to make a living for their families.

Now, about those safety regulations. The Federal Occupational Safety and Health Administration (OSHA) [regulations require construction companies](#) working over open waterways to have safety boats on standby. But according to [the AP](#), "Coast Guard representatives and other officials said they were unaware of any Brawner boat in the water." It's impossible to know whether a safety boat could have saved lives that night by issuing a radio warning to the crew, but it's something construction companies will need to account for in the future, especially as the [Key Bridge is rebuilt](#).

Moving Forward Together

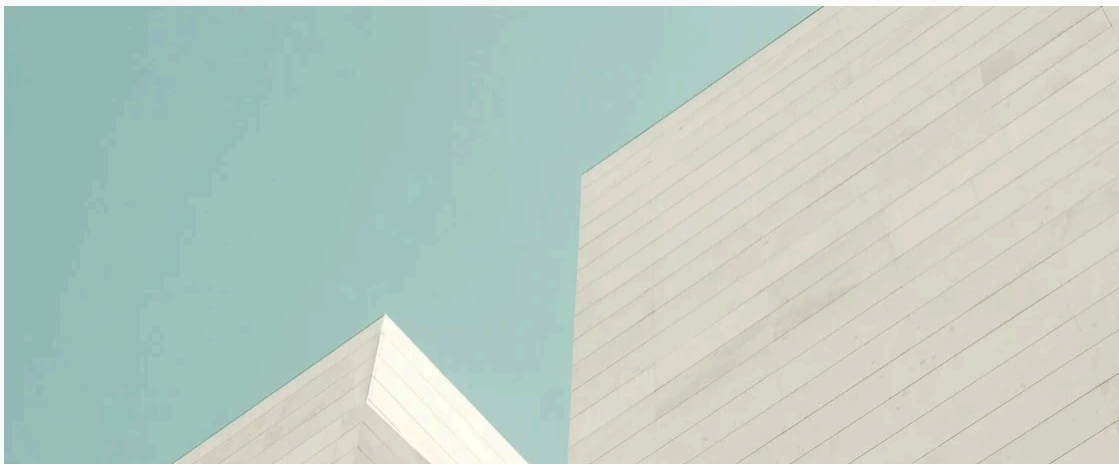
So, what's happening now? The focus is on cleaning up the mess and getting things back to normal at the Port of Baltimore. And it's no small task. It's a whole engineering marvel in and of itself.

If you want to dive deeper into the nitty-gritty of what's going on, we highly recommend checking out this [interactive piece from the Washington Post](#). They break down the three-step process needed to clear the channel, float the Dali, and haul away all the wreckage from the Patapsco. It's fascinating stuff.

And get this—hundreds of engineers, divers, and other brave souls have already managed to move a whopping [450-ton chunk](#) of the bridge using one of the biggest floating cranes on the entire East Coast. Talk about impressive!

Oh, and here's some good news: a 38-foot deep channel [opened up on April 25](#), allowing the first of 11 large cargo ships that were trapped at the port to finally sail out. Officials are crossing their fingers and hoping to have everything back up and running [by the end of May](#). You can even tune in to a [livestream](#) to watch the progress unfold.

As we pick up the pieces and work toward reopening the Port of Baltimore, we must remember these hard-learned lessons and make changes to keep our infrastructure and work sites safe. The outpouring of support for the victims and the city of Baltimore in the recovery efforts are a reminder of what we can achieve when we all pull together.



Wonderstruct News

It's Construction Safety Week!

May 6-10 marks the tenth year of [Construction Safety Week](#). This year, the focus is preventing falls in construction, the leading cause of injury to workers. Wonderstruct can help you maintain code compliance and industry standards with a detailed safety plan for your company or project.

Welcome, GILK!

Wonderstruct is excited to have GILK as our new client! They're the go-to experts for luxury builds in Tampa and Denver. Don't forget to give them a visit at [GILK.com](#). Welcome aboard, GILK!

Did you know?

We now offer SEO services. If you want to increase traffic to your site and win more clients, we can make it happen.

Our Network Celebrations

- **PDCC Hits 1,000 LinkedIn Followers:** We helped Chicago-based [Preston Design and Construction Consulting \(PDCC\)](#) create social media content that's connecting with their audience and netting them new followers on [LinkedIn](#) and [Instagram](#). Follow along!
- **EVstudio Wins NAHB 2024 Offsite Construction Award:** EVolution Studio, [EVstudio's](#) modular design team, took home [NAHB's 2024 Offsite Construction Award](#) for Innovative Product or Service. Congratulations!

Event: Corenet Chicago Speed Mentoring – May 14

[Reserve your spot](#) for this dynamic Speed Mentoring event hosted by the [CoreNet Chicago](#) Young Leaders, and get ready for an evening of learning and inspiration that could propel your career to new heights!

Tuesday, May 14 from 5:30 – 8:30 p.m.

BOS – 325 N. Wells Street, Suite 110, Chicago, IL

CoreNet Members: \$35, Non-Members: \$60

Our Writers



Chelsey B. Coombs

Social Media Producer

Chelsey, our social media maven, is a science journalist who has built audience strategies for publications such as Popular Science, The Weather Channel and VICE News. At Wonderstruct, she uses her journalistic background to create data-driven social media content tailored to each client's goals and brand voice. Chelsey is based in NYC.



Jenna Neary

Content Director

Jenna is a master storyteller with a knack for analytics. At Wonderstruct, she's the brain behind our content strategies and the powerhouse managing our web design projects. With her SEO savvy, she builds authentic organic content that lays the foundation for brand growth. Jenna is based in Atlanta.



Not subscribed? Fill out the contact form on our [website!](#)

Wonderstruct, Chicago, IL | Orlando, FL |, Denver, CO

[Unsubscribe](#) [Manage preferences](#)

Send free email today

HubSpot