



Photo: PCI

## Avoiding Poor Habit Transfer

William N. Nickas, *Editor-in-Chief*

Familiarity is comfortable. When you have a favorite pair of jeans, coat, or boots, there's an ease to how they fit and feel. You know what you're getting into. I'd argue that familiarity in design and construction is similar. It's comfortable, and if we're not careful and cognizant of this ease, we can settle into a stagnated design or construction approach. Like our favorite sweatshirt, our past solutions provide comfort; it's easy to reach for the tried and true. These reliable solutions are consistent performers and solve the problem. It's at that point of comfort when we might enter an area of "poor habit transfer."


This concept has many applications and came to light for me recently when a friend borrowed a tractor with far greater operational capabilities than his own. For example, this new machine has the ability to traverse 30-degree slopes. My friend used this tractor for a few days and then returned to his own machine. Later that week, we met up to chat and he relayed how his day almost ended in disaster. After he had become comfortable on steeper slopes with the borrowed machine, he found himself in a precarious situation on his own equipment. Fortunately, he was able to slowly lessen the slope and avoid rolling over.

If we allow our approach to become overly repetitive and settle for typical, familiar offerings even when the situation changes, we risk becoming a victim of complacency brought about by poor habit transfer. That is why continuing to push new ideas, advance innovative solutions, and reenergize professional discussions will keep us from becoming complacent.

It's in this frame of mind that we began our four-part series, "Anchors in Concrete," on implementing the recently added Article 5.13 of the American Association of State Highway and Transportation Officials' *AASHTO LRFD Bridge Design Specifications*. The article about anchors in concrete in this issue of *ASPIRE*® concludes this series. We owe a great deal of thanks to Dr. Donald "Don" Meinheit, Dr. Ron Cook, and Mr. Neal Anderson for their efforts in energizing our minds on this topic. Concrete anchors are not the spicy-hot topic most bridge engineers gravitate toward, but their importance cannot be overstated. Structural integrity is dependent on all bridge components working in concert, and concrete anchors play a significant role.

Dr. Oguzhan Bayrak continues to advance our discussion related to redundancy and ductility for concrete bridge design. The importance of this topic is critical as we continue to advance concrete bridge solutions that require increased girder lengths, novel geometric elucidations of beam cross sections, and new materials.

Also in this issue, Dr. Richard Miller has graciously shared his approach to teaching ethics to his engineering students as we continue to learn from the Florida International University bridge collapse. With that event also in mind, we requested and were granted permission by the National Society of Professional Engineers to reprint their *PE* magazine article "A Load That's Hard to Bear."

Our profession demands our best. While others may become complacent, we must fight the doldrums that familiarity can bring. Let's collectively work to avoid poor habit transfer. 

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### Cover

The use of movable scaffold systems facilitated construction of the concrete segmental box girder approach spans for the Gerald Desmond Bridge Replacement in Long Beach, Calif. Photo: Marie Tagudena.

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