

Introduction to **PRO**: An ACI Center of Excellence for Advancing Productivity



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THE WORLD'S GATHERING PLACE FOR ADVANCING CONCRETE

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CONVENTION



Presentation Outline

- **PRO:** What and Why
- **PRO** Vision
- **PRO** Mission
- **PRO** Activities
- How **PRO** will improve the concrete industry



DIVE BRIEF

Construction lost as much as \$40B on poor productivity in 2022

About half of contractors see labor inefficiencies worsening, according to a new report, but firms see relief through lean practices.

Published Oct. 12, 2023



The Story Construction Tells About America's Economy Is Disturbing"

"Here's something odd: We're getting worse at construction. Think of the technology we have today that we didn't in the 1970's. The new generations of power tools and computer modeling and teleconferencing and advanced machinery and prefab materials and global shipping. You'd think we could build much more, much faster, for less money, than in the past. But we can't. Or at least, we don't."

"Throughout the 1950s and 1960s, productivity in the construction sector grew faster than productivity in the rest of the economy. Then, around 1970, it began to fall, even as economywide productivity kept rising. Today, the divergence is truly wild."



McKinsey Global Institute - Report on Construction Productivity

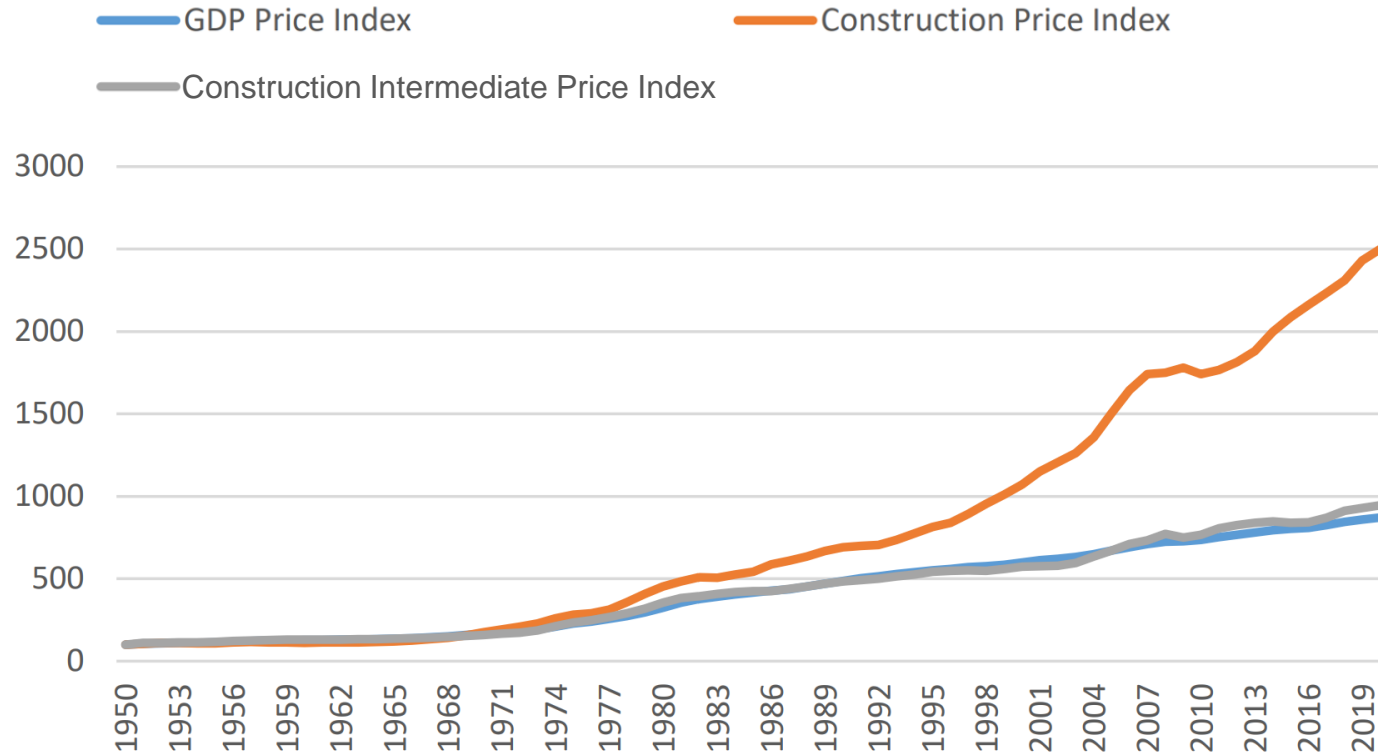
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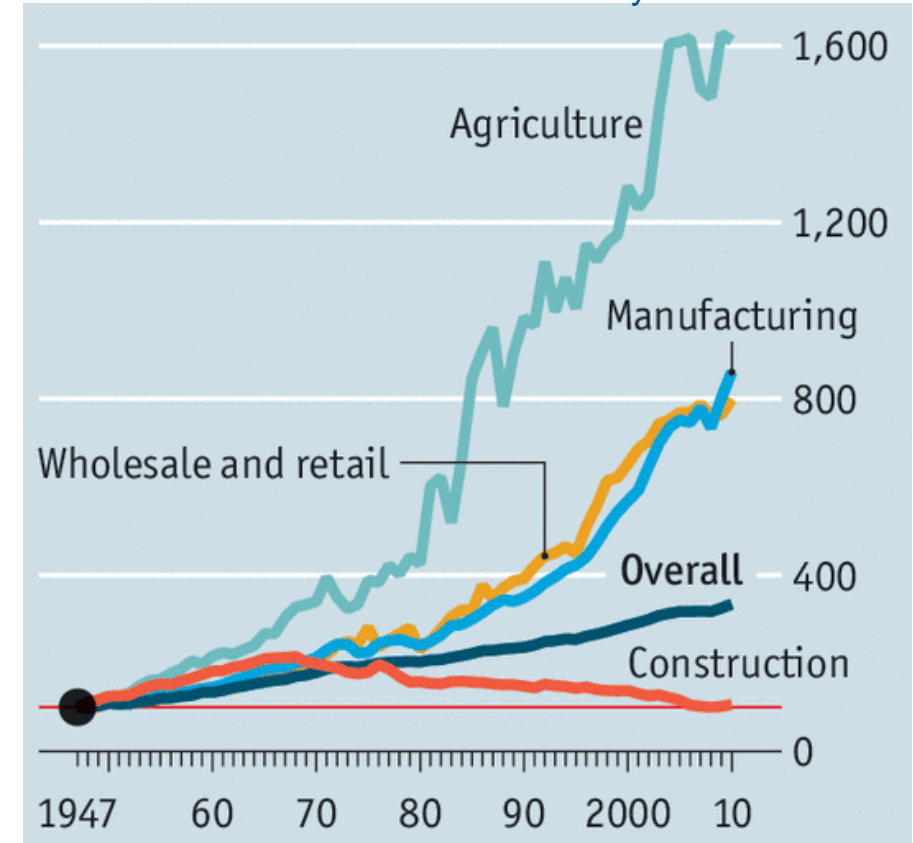
U.S. Prices vs. Productivity

Source: National Bureau of Economic Research



Prices

Source: McKinsey Global Institute



Productivity

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“Construction is a key industry in countries across the world, but one that has struggled to evolve its approaches as other industries have done, and one whose productivity has suffered as a result. **Even while other sectors from retail to manufacturing have transformed their efficiency, boosted their productivity, and embraced the digital age, construction appears to be stuck in a time warp.** In the United States since 1945, productivity in manufacturing, retail, and agriculture has grown by as much as 1,500 percent; productivity in construction has barely increased at all. This not only represents a lost opportunity for the industry but costs the world economy.”

McKinsey Global Institute 2017

McKinsey: Recommendations for Improving Industry Productivity

- Improve the constructability of design
- Embrace innovation
- Reshape regulation
- Rewire contracts
- Improve procurement and supply chain
- Improve onsite execution
- Reskill workers





TRADITION

JUST BECAUSE YOU'VE ALWAYS DONE IT THAT WAY
DOESN'T MEAN IT'S NOT INCREDIBLY STUPID.



ACI and PRO

Two
Independent
Organizations

Symbiotic
Relationship



American Concrete Institute
Always advancing



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PRO: An ACI Center of Excellence for Advancing Productivity

- **PRO** is incorporated as a non-profit 501(c)3 ACI subsidiary with its own bylaws and Board of Direction
- **PRO** is focused on a ***specific industry target***, which will allow ***faster progress*** toward its objectives
- **PRO** members will primarily be corporations and non-profits who will provide the bulk of **PRO**'s financial support
- **PRO** retains IT, accounting, marketing, and other services from ACI



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PRO Vision:

The Center envisions a concrete industry where the productivity potential of contemporary materials and construction systems is fully realized and continually advanced.



PRO Mission:

Collaborate with designers, material suppliers, builders, and other industry stakeholders to improve design constructability and construction productivity for all concrete structures.



PRO Activities:

- Constructability resources
- Technology Advancement
- Construction best practices
- Knowledge transfer and professional development
- Association outreach
- Interaction with ACI committees





Empire State Building

- Excavation began January 22, 1930
- Building opened on May 1, 1931
- Construction duration was ***less than 16 months*** from excavation to opening
- World's tallest building until 1970 when it was surpassed by the World Trade Center



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Thank you

*For more information, please visit **PRO** at:
www.concreteproductivity.org*