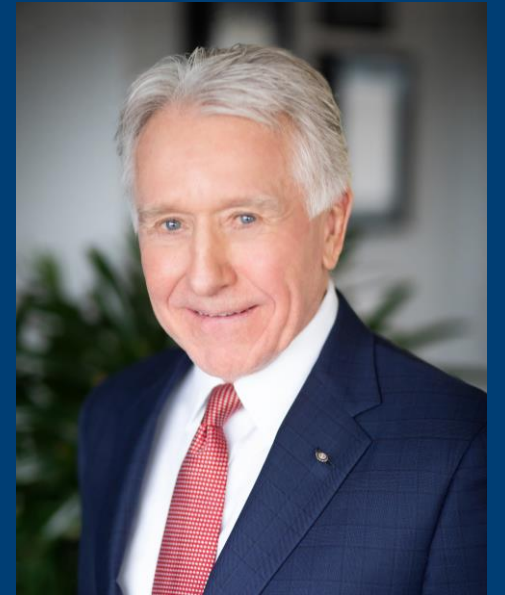


Productivity Takes the Spotlight

ACI's Newest Center of Excellence

Cary Kopczynski PE, SE, FACI, FPTI
ACI Past President



American Concrete Institute

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“The Story Construction Tells About America’s Economy Is Disturbing”

The New York Times

February 5, 2023

“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.”



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McKinsey&Company

MCKINSEY GLOBAL INSTITUTE

REINVENTING CONSTRUCTION: A ROUTE TO HIGHER PRODUCTIVITY

FEBRUARY 2017

IN COLLABORATION WITH
MCKINSEY'S CAPITAL PROJECTS & INFRASTRUCTURE PRACTICE



McKinsey Global Institute - Report on Construction Productivity

February 2017



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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

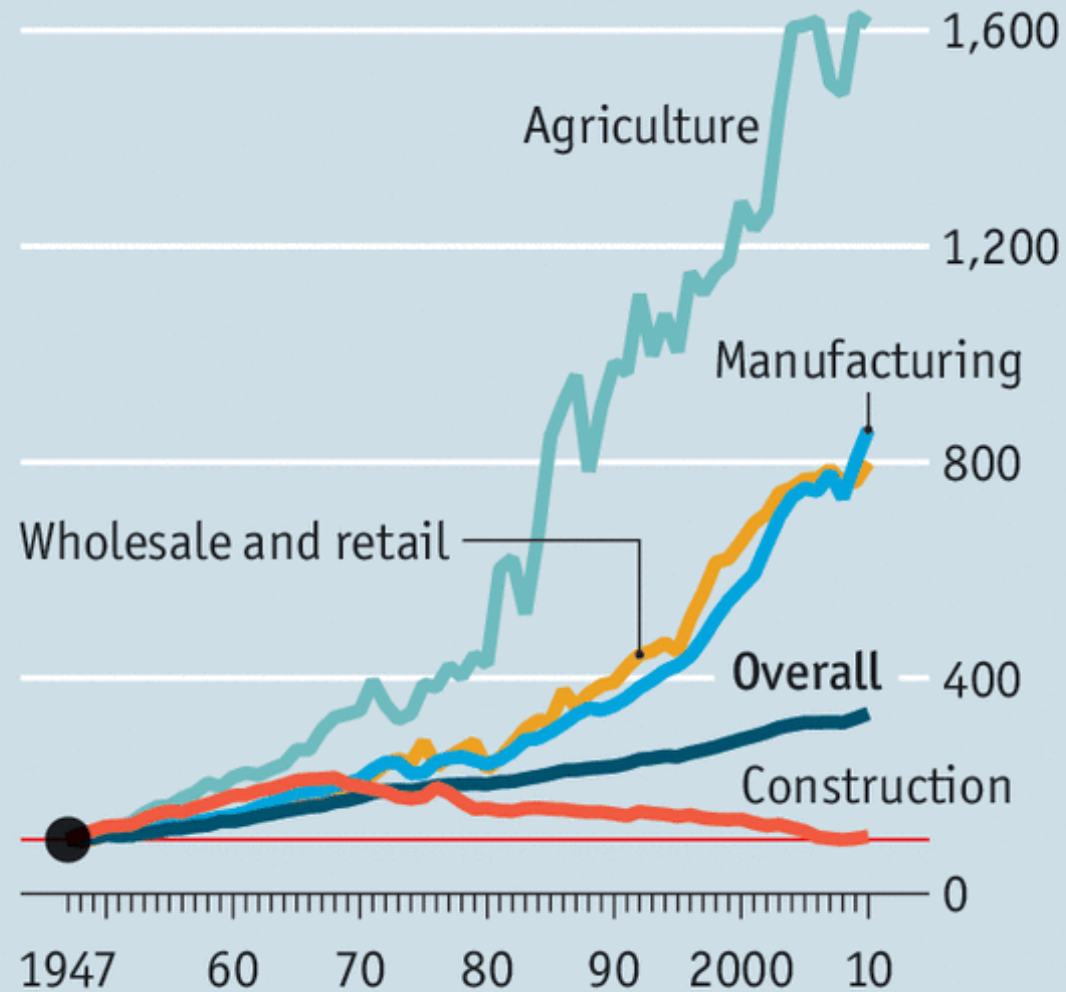


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United States, gross value-added*

Per hour worked, 1947=100



Source: McKinsey Global Institute

*At constant prices



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McKinsey: Recommendations for Improving Industry Productivity

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

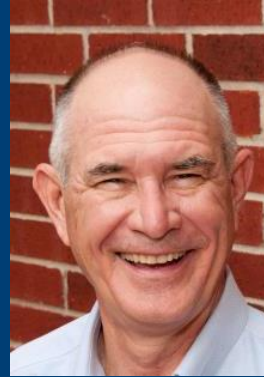
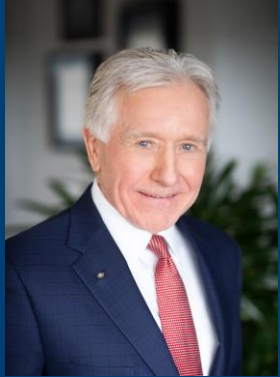


ACI Response to Productivity Challenge

- The ACI Foundation’s Strategic Development Council hosted a “Productivity in Concrete Construction” workshop in February 2020 in Charleston, South Carolina
- Workshop participants continued meeting after Charleston as a group called the “Productivity Posse”
- The Productivity Posse led to the formation of an ACI Task Group that developed recommendations for how ACI could use its resources to improve constructability and productivity



ACI Board Task Group



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ACI Task Group Recommendations

- ACI University training on constructability
- Feedback to ACI committees
- Engineer field training
- Constructability index
- ACI Center of Excellence



ACI Centers of Excellence: What are They and Why?

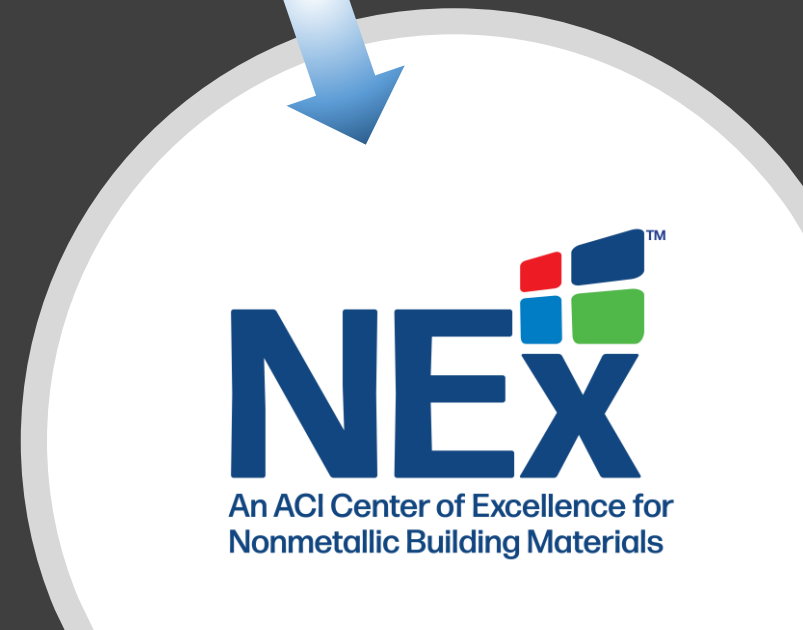
- Each CoE is incorporated as a non-profit 501(c)3 ACI subsidiary with its own bylaws and Board of Direction
- Each CoE has a ***laser focus on a specific industry target***, allowing ***rapid progress*** toward the CoE's objectives
- CoE members are primarily corporations and non-profits who provide the bulk of each CoE's financial support
- ACI provides IT, accounting, marketing, and other services for which each CoE is charged
- The CoE's have the option of co-branding their information with ACI to benefit from ACI's global stature



ACI and NEx

Two
Independent
Organizations

Symbiotic
Relationship





**An ACI Center of Excellence
for Carbon Neutral Concrete**



PRO

An ACI Center of Excellence
for Advancing Productivity



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 continually improve the constructability of design and productivity of construction for concrete structures of all types.



PRO: An ACI Center of Excellence for Advancing Productivity



Phil Diekemper
Executive Director



An ACI Center of Excellence
for Advancing Productivity