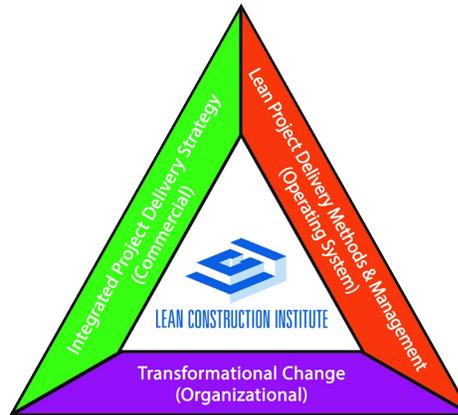


Lean Construction Overview



LCI VISION:

TRANSFORM THE DESIGN AND CONSTRUCTION INDUSTRY SUPPLY CHAIN TO PROVIDE VALUE AND ENABLE OTHER INDUSTRIES THROUGH LEAN AND INTEGRATED APPROACHES.



Goals:

Increase owner and construction supply chain satisfaction with design and construction delivery.

- Deliver Standard Building Blocks for Lean and Integrated Delivery
- Create Construction Industry Demand & Capacity for Lean & Integrated Approaches
- Achieve Customer Value while Eliminating Waste throughout Project Life Cycle
- Achieve Supply Chain Partner Value while Eliminating Waste throughout Project Life Cycle
- Create a Vibrant Learning Environment across the Country to share Best Practices

Lean/Integrated Project Delivery (Lean/IPD) is a response to customer and supply chain dissatisfaction with the results in the building industry. The construction labor efficiency/productivity has decreased while all other non-farming labor efficiency has doubled or more since the 1960's. Currently, 70% of projects are over budget and delivered late. The industry still sees about 800 deaths and thousands of injuries per year. The industry is broken.

This is not a construction-only issue; it spans the entire delivery system. The silos created around architects, engineers, general contractors, trade contractors, and specialty providers have introduced significant waste into the delivery system. An alarming lack of trust has created systems of checks, double-checks, and over specification to cover legal ramifications – either real or perceived.

Lean/IPD has shown that this phenomenon can be reversed as shown below.

Benefits Reported by a High Percentage of Lean Practitioners (By Level of Achievement)

Source: McGraw Hill Construction, 2013



Lean construction is a relationship-based system that is founded in commitments and accountability. It significantly improves trust. Teams are integrated through collaborative tools and search for ways to eliminate waste -- specifically at the [hand-off of work](#). Teams seek to continuously improve through reflection. Lean/IPD processes are designed to remove variation and create continuous work flow to drive significant improvement in predictability and strongly encourages respect for all people involved.

[High Performing Team](#) selection through a value based [Partner Selection](#) assessment allows multiple subject matter experts to provide their knowledge in new ways through [onboarding](#) practices, [Cluster Team](#) development, and early incorporation of means and methods. These practices ultimately lead to higher quality, lower-cost projects. Partners come together in a [Big Room](#) environment and learn to function as one team by creating [Long term business partnerships](#). Teams improve by [Learning to See Waste](#) through the use of [Retrospectives](#) like the common [Plus/Delta](#). Enhanced [Facilitation](#), [Agenda](#) management, [Production Systems](#) implementation, and the [Last Planner® System](#) are tools that drive productivity into meetings, planning sessions, and construction efforts.

Owner/operators are offered a significantly improved [Value decision making](#) opportunity and project predictability through [Target Value Design](#). Teams learn to make better decisions with the use of [Choosing by Advantages](#) and present better solutions to complex problems through the [A3 thinking](#) process.

All this is a framework for significant improvement in predictability and offers significant respect for all people involved. It can be structured through a common contract based around [Conditions of Satisfaction](#) that aligns goals and allows all parties to win together -- not at the expense of each other -- by creating a unique [Business Deal](#)

Please join the numerous owners, designers, builders, specialty trades and individuals who have joined the Lean Construction Institute and begin your journey.

Click on the links in this paper to learn more about each topic. Further information and application knowledge is available at [LeanConstruction.Org](#)