

## Lean Project Delivery Boot Camp

The Lean Project Delivery Boot Camp is a Level 1, full day, interactive workshop that introduces Lean project fundamentals and practices, and covers the process and requirements of the Last Planner® System (LP®S), part of the Lean Project Delivery methodology enabling improved project outcomes.

### Learning Outcomes

Participants will learn how the Last Planner® System improves productivity through the creation of flow and elimination of variability. Participants will come to understand how Pull Planning enables last planners to make the commitments and promises needed for reliable work flow in a collaborative work environment in order to improve project results.

This course prepares participants to implement LP®S on projects and enables them to:

- Define different types of variation in the design & construction process
- Explain & distinguish the concepts of throughput, cycle time and work in progress
- Describe the role of variation in production operations
- Identify sources of waste in construction settings and corresponding mitigation techniques
- Develop a Pull Plan
- Track key metrics in Pull Plan execution
- Appreciate the power of Team collaboration

### Course Content

Through the review of core Lean learning materials, case studies, and hands-on simulations, participants will learn how implementing LP®S on their projects enables project teams to interact in a collaborative environment to plan work that will produce predictable and reliable workflow, delivering high value in less time, at lower cost, with reduced risk.

Delivered with a supplemental 30-page guide, the Bootcamp workshop includes:

- The Business Case for Lean Project Delivery
- Introduction to Lean Principles and Practices
- Learning to see and Eliminate Waste
- Understanding of Flow and Variability through Hands-on Simulations
- Introduction to the Last Planner® System through the Villego Simulation
- Understanding the concept of Pull Planning

In a structured environment, using the Villego system to simulate a construction site, each team builds a Lego building. In the first round, based on traditional delivery methodologies, we baseline the team's planning and building capabilities. Next, we learn the Last Planner® System and how it is used to plan and execute projects with collaboration, discipline and accountability. In the second round, we test the newly acquired LP®S knowledge and measure the results.

The Villego simulation typically creates the “aha” moment in understanding how LP®S can improve project workflow with last planners collaborating to deliver increased value for building owners, designers, constructors, trades and the supply chain.