

# LAST PLANNER® SYSTEM OF PRODUCTION CONTROL

## 1.0 Why

Why do Lean projects typically start by using the Last Planner System® (LPS)?

The aim of Lean/IPD is to deliver all of the value promised to the client without the usual waste that typically comes with projects in the built environment. The vast majority of those projects are performed by a group of specialists who are convened for one project. For the most part, those specialists set out to perform their part of the project while seeking to maximize their use of resources. The local optimization runs counter to the optimization of the project as a whole, resulting in poor flow, waste of many types and overburdening of resources. The Last Planner System<sup>®</sup> brings stability to the project by giving attention to flow while reducing variation in the hand-off of work between the specialists in a continuously improving situation.

## 2.0 What

What makes the LPS® a Lean system for planning and managing work?

"The intention of the system and the fundamental nature of the practices involved are clear: Produce predictable uninterrupted workflow by creating a coherent set of commitments that connects the work of the specialists to the promises of the project to the client and coordinates their actions.

"This happens in five recurring conversations each designed so the team can manage the network of commitments inside each of their accountabilities."

The Last Planner System®: Conversations that Design and Activate the Network of Commitments, Greg Howell and Hal Macomber

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What are the five conversations?

People often refer to the conversations as "should - can - will - did - learn" planning.

- Pull-planning for Production System Design establishes what should be done.
- Make-ready planning gets the upcoming work in a condition so that it can be done.
- Weekly work planning establishes the set of promises from specific people for the work that *will* be done.
- Daily commitment management supports the last planners in staying on track with their promises so that the work *did* get done.
- At least weekly, the last planners take time to *learn* from their performance.

### 3.0 How

Can the Last Planner System® be used in design?

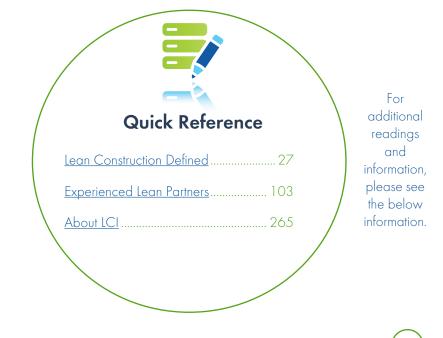
Yes! While design work doesn't have the hard logic of construction work, it is still accomplished in a network of commitments made among specialists. That network can be designed and managed so that the work that should be done can be done and will be done. Some adaptations have been made.

Why is the LPS® trademarked?

The Lean Construction Institute (LCI) holds a registered trademark on Last Planner<sup>®</sup>. LCI's purpose in trademarking the term is to take care of the use and meaning of Last Planner and the Last Planner System of Production Control<sup>®</sup>. There is no intent to prevent people and companies from using the LPS<sup>®</sup> to deliver their projects. All LCI asks is for people to include the registered trademark <sup>®</sup> once in any document, to note that the Lean Construction Institute is the owner of the trademark and to include LCI's website with the attribution, <u>www.leanconstruction.org</u>.

#### References

Responsibility-based Project Delivery by Lean Project Consulting /Hal Macomber and Rebecca Bettler, 2011



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# CHAPTER 25 – LAST PLANNER SYSTEM OF PRODUCTION CONTROL Additional Readings

#### Phase Scheduling

**<u>3 Production Control Principles</u>** 

9-15-08 Lean Construction Opportunites Ideas Practices

<u>A Lean And Agile Construction System As A Set Of</u> <u>Countermeasures To Improve Health, Safety And Productivity In</u> <u>Mechanical And Electrical Construction</u>

<u>A Project in Review-Owner Case Study-Message to the Facilities</u> <u>Team</u>

Alliance Lean Design Construct on a Small High Tech Project

Born to be Lean

<u>Creating Value A Sufficient Way To Eliminate Waste In Lean</u> <u>Design And Lean Production</u>

Editorial Lean and Integrated Project Delivery

EM Dirkson Courthouse Case Study

Hard Bid Multi Prime Airport Last Planner

Historical Context of Lean Construction

Jackson Federal Building Case Study

KanBIM Workflow Management System Prototype implementation and field testing

Keynote Case-SHEMC Lessons Case Study

Keynote Case-Temecula Valley Hospital

Last Planner and Integrated Project Delivery

Lean Construction Practices and its Effects A Case Study at St Olav s Integrated Hospital, Norway

Lean Construction Prospects for the German construction industry

LEAN CONSTRUCTION THE CONTRIBUTION OF ETHNOGRAPHY

Lean Construction Where Are We And How To Proceed

Lean for Field Operations-Brian Lightner

Lean production, value chain and sustainability in precast concrete factory - a case study in Singapore

Owner Perspectives-UHS

Prefabrication and Pull Planning at Scale-Parkland Hospital

Projects in Review-Revolutionizing Construction Management with Lean and Last Planner

Projects in Review-The Facebook Journey

Rethinking Lookahead Planning to Optimize Construction Workflow

Reverse Phase Scheduling Slides - George Zettel

Site Implementation and Assessment of Lean Construction Techniques

Target Costing - Glenn Ballard

Target Value Design Case Study - Patrick Vasicek

Target Value Design Current Benchmark

The Combination of Last Planner System and Location-Based Management System

The Lean Project Delivery System An Update

What makes the delivery of a project integrated A case study of Children's Hospital, Bellevue, WA