



# Earning a “White Belt” in Lean principles



**Newly minted White Belts and Lean trainers from Lean Fundamentals. Pictured, left to right: Peter Gormley, New England Waterproofing; Brad Aldinger, Haley & Aldrich; Carson Milgroom, New England Waterproofing; Chris Guarino, Commodore Builders; Lauren Larson, Commodore Builders; Kate Merrill-Duhaime, Haley & Aldrich; Pete McGuane, N.B. Kenney Company; Kristine Gorman, Jacobs; Martine Staublin, STV | DPM; Cole Worthy, Haley & Aldrich; Kelly Meade, Haley & Aldrich; Michael Bongiorno, Northstar Project & Real Estate Services; Rachel Woodhouse, Dyer Brown Architects.**

This past spring, Haley & Aldrich hosted multi-day Lean Fundamentals and Visual Management training courses for 30 architects, owner/developers, project managers, subcontractors and construction managers in Massachusetts – including several who are members of ASM. The training courses were offered at no cost to qualified participants from small businesses, thanks to the Commonwealth of Massachusetts Workforce Training Fund grant.

In this article, we look back at the courses and the favorable reactions from participants – and we also look ahead to the next series of training courses starting in September. If you are an AEC industry professional interested in learning more about Lean concepts and practical application, we encourage you to attend! (See more details at the end.)

Lean Fundamentals introduces participants to Lean principles and tools through a “learn-by-doing” approach, and participants develop the ability to use Lean principles to help better

understand and address challenges in their daily work and learn techniques for better collaboration with customers and team members.

In the spring Fundamentals courses, participants tackled challenges at their own organizations, such as improving proposal processes, centralizing project information and providing more accurate project scopes and budgets. Throughout the course, attendees collaborated to draft problem statements, identify the root cause of their challenges, and develop A3s<sup>®</sup> for solving their challenges.

With a grounding in Lean Fundamentals, participants can take the visual management course. This course is a Lean concept that’s focused on improving the flow of work, developing the ability to detect when work is off track so you can quickly adjust and fix problems and empowering your team to see the big picture of a process so you know what actions to take and who to involve.

The course is structured around practical exercises that encourage learning by doing. For example, in one exercise



**Visual management students, with assistance from J&M Brown Company employees, celebrate improvements to a prefabrication area.**



**Working through the root causes of a problem as a team. Pictured, left to right: Joe Giurleo, Bay State Wiring; Jim Stanislawski, Gensler; Bryan Gammons, Haley & Aldrich; Matt Ellsworth, Wilson Architects**

called the “Marshmallow Challenge,” teams had 18 minutes to build the tallest tower that will support a marshmallow by using 20 strands of spaghetti, a yard of masking tape and some string. Neither team was successful, but the exercise taught principles such as “squashing” the difficulties of innovative teamwork and the downfalls of hidden assumptions. Both teams finished the exercise by conducting a Root Cause Analysis to analyze how they could approach the project more successfully.

Feedback from these courses has been very positive, with 100% of attendees saying they were satisfied or very satisfied with the quality of the training content and materials, and would recommend the courses to peers in the industry. In the words of several who attended in the spring:

“The training provides learning and doing at the same time – it was an opportunity for me to solve an actual problem.”

“It was an excellent use of my time and taught me how to use new tools that will make me a more effective collaborator



**Paul Arthur shows students electric prefabrication methods at J&M Brown Company**

and problem solver.”

“I think everyone could benefit from knowledge of how to look at problems and to use an A3 to get to the root of the problem so that you can work on fixing the right issue.”

As photos from the workshops show, the Lean training is dynamic and hands-on, fostering team-building and cooperation to solve real-life problems.

The next series of Lean Fundamentals sessions will start September 6, and run one half-day per week for four weeks, ending October 4. It will be followed by another series starting October 11, and likewise will run for four weeks, ending November 8.

All Lean Fundamentals sessions will take place from 8 AM – 12 PM at Haley & Aldrich in Charlestown.

For more information on the courses, or to register and determine your eligibility to take this training at no cost, please visit [info.haleyaldrich.com/lean-workshop-series](http://info.haleyaldrich.com/lean-workshop-series). Register for the September series by August 23, and the October series by September 27.

\*An A3 is single-page story written to build problem-solving consensus that follows the scientific method. The name A3 refers to the paper size, where an A3 is the international equivalent of an 11 X 17 sheet of paper. Toyota pioneered the use of A3s, some referring to it as Toyota’s Secret Weapon. ▲



**The Marshmallow Tower Game helped students see the difficulty of forming an innovative team. Pictured, left to right: Peter Gormley, New England Waterproofing; Morgan Vanderburgh, Gilbane Building Company; Joe Giurleo, Bay State Wiring; Michael Bongiorno, Northstar Project & Real Estate Services**



**Students learn how to use Visual Management to track knowledge-based professional services at Triumph Modular, Littleton, MA**

*Kelly Meade and Nick Masci are Senior Lean Practitioners at Haley & Aldrich. Kelly Meade can be contacted at [kmeade@haleyaldrich.com](mailto:kmeade@haleyaldrich.com); and Nick Masci can be contacted at [nmasci@haleyaldrich.com](mailto:nmasci@haleyaldrich.com).*