Lean Summit Take-aways (continued):

**More reasons from Greg Howell on Why Lean has been adopted:** To become a customer of choice in a tight market (USA); to complete projects on schedule (Venezuela); to reduce the costs of public projects (Finland); to improve safety (USA). Greg wound up with things you need to learn fast to start your lean journey: Start with cultural and process changes in your own shop. Get top management to declare commitment and encourage the adoption of principles and practices internally. Take small, complete steps via pilot programs, making it simple and real and indicative of the need for further change. Start a delivery guide (contact LCI for a great one to use as a template). Educate the community to create supplier capability – ideally, work through an LCI Community of Practice to leverage your efforts. Learn how Choosing by Advantages works and can benefit you.

**Bernita Beikmann of HKS spoke about change management** in the context of Lean, noting that we are all OK with change in theory, but less enthusiastic when it challenges our long-held beliefs in practice. The 5-step learning process can be laid out at as a circle, where learning leads to unlearning, then relearning, then practice, and finally, teaching. Tools and techniques may need to be modified all the time to accommodate the different needs of each new team. Finally, she spoke from experience on what Lean is and is not: It is not a tool box, a slide deck, or magic fairy dust; it can’t be taught in an hour, and it is not an acronym. It is: lots of hard work, the right thing to do, and something that never stops. Annmarie Thurnquist also had a good PPT slide on change: Change is a challenge for the courageous, an opportunity for the alert, and a threat to the insecure.

**Jim Goff with Lend Lease Construction presented a case study** on projects he had led using Lean techniques, including Last Planner®. (Jim is active in our NC CoP.) Among the initial goals was to educate subcontractors on the benefits of Lean and LP® as a primary planning tool. Success was achieved, but not without some long and steep learning curves, but over time the participants melded together as increasingly effective teams. Success factors included: make it visible; get the capital team lead, end user, and client PM to review pull planning sessions. Encourage better teaming, such as when subcontractors inspect each other’s work depending on who’s onsite at a given time; generate friendly competition, so the trades come to feel they don’t want to let the team down, plus the lowest percentage completion scores were required to bring goodies for the team next day. One superintendent nearing retirement said he would come out of retirement if he could work for the company one more time when the next phase began. Finally, the results speak volumes: all three projects were completed without a lost time incident, on or ahead of schedule, and under budget!

Glenn Ballard (P2SL) wound up the program on the **Realized Benefits of Lean in Construction**. His talk included a mini case study of a wafer fab in Texas (1996) that showed that 70% of the reasons for plan failure on this industrial project derived from materials issues, of which 90% derived in turn from in-house provisioning—totally within the company’s own control. In a study of 22 Lean projects delivered since 2005 under three separate owners, none were over budget or schedule, no sacrifice was needed in scope or quality, and cost at completion was 3.4% under budget and roughly 15% under market, on average.