2017 LCI Congress - 19th annual agenda
Oct. 16-20 | Anaheim, Calif.
Wed-Thu General Sessions | Mon-Tue Training Days | Fri Gemba Day

Day/Start Time	Length	Event Type	Type	Presentation Title	Description (Background, Motivation, Big Idea)	Speaker Name, Organization	Tracks	Level	Session Code	Capacity	Location	Sold Out?	Open To… (All, LCI corporate
This agenda is current as of Friday 10/13/2017. For the most current agenda, please log into the app.													
General Session - Wednesday, Oct. 18													
Wed. 6:45 AM	**45 mins**	Lean Coffee/Meal		Lean Coffee/Breakfast	Lean Coffee is an organized meeting. Participants gather and build an agenda to discuss lean related topics. The discussion is focused and productive because the agenda for the meeting is generated by the attendees. To benefit most from the time, be on time and plan on participating for the entire session.		None	None	LC1	TBD	Marquis - Plenary Room	SOLD OUT	All
Wed. 7:45 AM	**15 mins**	General Session		Congress Welcome/Opening Remarks		Dan Heinemeier, LCI Executive Director	None	None	W2PS	TBD	Marquis - Plenary Room	No	All
Wed. 8:00 AM	**60 mins**	General Session		Keynote - Patrick Lencioni	**The Four Disciplines of a Health Organization** Patrick Lencioni is founder and president of The Table Group, a firm dedicated to providing organizations with ideas, products, and services that improve teamwork, clarity, and employee engagement. Lencioni's passion for organizations and teams is reflected in his writing, speaking, and executive consulting. He is the author of eleven best-selling books with nearly five million copies sold.	Patrick Lencioni, Best-Selling Business Author, Internationally Recognized Speaker, and Thought-leader	None	None	W3PS	15	Marquis - Plenary Room	No	All
Wed. 9:00 AM	**15 mins**	General Session		Why Projects Excel? Perfecting the Pitch: Influencing Lean Adoption		Bevan Mace, Balfour Beatty	None	None	W4PS	TBD	Marquis - Plenary Room	No	All
Wed. 9:25 AM	**40 mins**	General Session - Individual		Pull Planning in Design - You have to do your homework before you can play!	The Last Planner System (LPS) has had its struggles being adapted for design. After facilitating over 100 pull planning sessions in design, we have discovered the root cause behind the struggle. We have examined the differences between construction LPS and design LPS. Design depends much more on flow than on handoffs, unlike construction. The concurrent and iterative nature of design does not lend itself to a linear planning process. We will present a systematic process (minus the chaos associated with some design pull plan sessions) for creating a reliable phase pull plan that optimizes the flow of design. This is the Big Idea that has not been fully recognized by current applications of the Last Planner System in Design. We will present the tools and steps necessary for the implementation of successful design pull planning sessions. This concept could change our industry's view of Pull Planning in Design. This presentation will be filmed.	Ronald Migliori and Larry Summerfield, Buehler & Buehler Structural Engineers; Uchenna T.E. Okoye, PE, LEED AP, Skanska Building USA; Shurid Rahman, Sutter Health	**Leveraging Lean in Planning & Design** **Owner Interest**	Intermediate	WA5	300	Salon E	No	All
Wed. 9:25 AM	**40 mins**	General Session - Individual		Alignment of CPM Scheduling and Short Interval Planning in Design and Construction	How to leverage both a Critical Path Method schedule and Lean practices like Last Planner System™ and collaborative phase planning to enhance project schedule reliability, transparency, and budget confidence, with a focus on keeping the two planning processes aligned from beginning to end. Our team will provide an overview of tried and true processes that helped unify a large trade partner community to develop and maintain a workable plan. As a large percentage of construction projects worldwide are required to use a CPM, we highlight the value that a CPM can provide and how that value is enhanced by coupling the process with Lean planning practices. This process allows the CPM to remain an effective tool, but the burden (time and resources) of creating and maintaining the CPM is greatly reduced. The four presenters are currently working together on a construction project for Disney that requires an extraordinary pace of design and construction and is immensely complex. They are using Lean principles and a several technology solutions to perform the planning process alignment described in this presentation.	Scott Kelly, Walt Disney Imagineering; Jeff Betts and Steven Solloway, Whiting-Turner Contracting Co.; Don Rote, Building Point Pacific	**Technology & New Techniques in Lean**	Intermediate/Advanced	WA2	300	Salon F	No	All
Wed. 9:25 AM	**40 mins**	General Session - Individual		A Case Study of Brown's IPD New School of Engineering Building	For those who may be apprehensive about undertaking major projects under Integrated Project Delivery (IPD) within the academic environment, this session offers practical advice based on proven methods and lessons learned. The question of how signature architects can endorse a delivery method where the cost informs the design and still achieve design goals will be addressed. In our larger economy, collaboration is essential. Day-to-day work of planning and managing projects will be directly improved through solutions grounded in IPD, target value design, Lean methodology, contracts and partnership strategies. Colleges and universities undergo long-term planning of the physical campus with finite budgets, programmatic, design, quality and facility life-cycle considerations. Brown University is a leader in their embrace of collaborative and creative project delivery models to complete signature projects. Learn the power and the potential of this highly collaborative project delivery method.	John Cooke, Brown University; Joubin Hassanein and Peter L'Hommedieu, Shawmut Design and Construction; Mark Davis, KieranTimberlake	**Lean Interventions Challenges & Transformations**	Intermediate	WA1	300	Salon GK	No	All

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Wed. 9:25 AM	**40 mins**	General Session - Individual		Implementing lean thinking at LAX by a Trade Partner	Los Angeles World Airports (LAWA) projects are delivered using the traditional delivery methods or design build at the GC/Architect level. These projects are competitively bid based on lowest responsible cost. The LAX T2 project was a turn key design build replacement of 15 AHUs while maintaining conditioning of the existing space and to be completed by 10/2016. The project was completed 2 month ahead of schedule and LAWA was able to identify financial savings. We want to share two BIG ideas: Innovation, partnership, collaboration and lean thinking. A LAWA project can be delivered successfully for all parties. And, lean can be initiated by one subcontractor/trade partner and radiated across the Owner, CM and other trade partners.	Van Thompson, Los Angeles World Airports; Jose Felsmann and Du Ly, Southland Industries	**Lean Interventions Challenges & Transformations**	Intermediate	WA3	300	Platinum 7-10	No	All
Wed. 9:25 AM	**40 mins**	General Session - Individual		Why Lean Projects are Safer	Some evidence exists that lean projects are safer, but we don't understand why. Providing an explanation is one of the objectives of the Construction Safety Research Group formed by the Project Production Systems Laboratory (P2SL) at the University of California, Berkeley. In this paper, we describe the research program of the group and its findings in year one of three, including an explanation why lean projects are safer that is grounded in the principle: Respect for people.	Glenn Ballard, University of California, Berkeley	**The Business Case for Lean**	Fundamental	WA6	300	Salon AD	No	All
Wed. 9:25 AM	**40 mins**	General Session - Individual		Leveraging an Integrated, Lean Project Delivery Team to Deliver Exceptional Safety in Construction	In 2016 there were 899 construction deaths in the United States and tens of thousands of disabling injuries. The Center for Construction Research and Training (CPWR) estimates that over a 45-year career, a construction worker has a 75 percent chance of experiencing a disabling injury. The same worker has a one in 200 chance of being fatally injured on the job during his or her career. •The Van Ness and Geary Hospital project in San Francisco is a 1 Million sq. ft. quaternary care hospital project constructed in the center of the city. The construction included demolition of a 9 story hotel, excavation and shoring 80 feet down into the ground, and erecting the new 240 foot tall hospital. •The project has a field work force peaking at 900 workers, and required over 4 million worker hours to build. •With this number of workers and hours, statistics and insurance actuaries say that the project will have dozens of disabling injuries and a significant probability of a death. •This Integrated Lean Project delivery team set out to set the bar for the industry – to have an exceptionally safe project. Motivation •Respect for people •Having every team member go home safely at the end of the day	Alyce Engle and Steve Yots, HerreroBoldt, Avnit Kang, Southland, Susanne, Beckwith, Rosendin, David Flack, California Drywall	**The Business Case for Lean** **Owner Interest**	Intermediate	WA4	300	Platinum 1-4	No	All
Wed. 10:05 AM	**30 mins**	**Other**		**Networking Break in the Exhibit Hall**			None	None			Exhibit Hall	No	All
Wed. 10:35 AM	**40 mins**	General Session - Individual		Creating effective communication and empowering the workforce	Continuous improvement has been a part of the KHS&S fabric since inception. This approach provides a platform for all major trades to get involved planning and lean sessions to create the most benefit for the project as a whole. KHS&S' field supervision and crews develop/participate in pull planning sessions, weekly work plans, weekly work plan maps, and progress maps with the General Contractor and affected MEPs to discuss sequencing, milestones, and safety. On the project site, KHS&S utilizes Lean Stand-Up Boards (per each crew in the field) which illustrate these weekly work plan maps and daily production goals. These boards are visible to the entire project team and are discussed daily at the stand-up meetings. By empowering team members, a vehicle is created for improving communication and fostering ideas. Specifically, construction crews that install the work utilize the Daily Stand-Up Board meetings to communicate and nurture ideas on how to decrease waste and provide better planning	Greg Stedman and Rob Walter, KHS&S Contractors	**Field-Driven Lean**	Fundamental	WB4	300	Platinum 1-4	No	All
Wed. 10:35 AM	**40 mins**	General Session - Individual		Lean Value Stream Delivery - MEP Systems Design, Fabrication, Installation & Service	In 2011, Limbach Facility Services completed a project to implement a 5D (Model Based Estimating) system, unifying a database across 11 locations and cross disciplinary functions (Engineering, Estimating, Planning, Fabrication and Installation) using model components that were directly tied to fabricatable parts and included material costs and labor estimation. Coupled with the in-house Limbach Engineering & Design Services and a nationwide implementation, the value stream of engineering through building systems service & maintenance was enhanced by improving the hand-offs between functional components of the organization, enabling design for manufacturing with fabricatable components as the basis of design from concept through shop drawings and supporting Target Value Design process on Design Build & IPD projects with real time estimating.	Kevin Labrecque, Harper Building Systems; Timothy Ward P.E. and Richard Davis, Limbach Engineering & Design Services	**Technology & New Techniques in Lean**	Intermediate	WB5	300	Salon F	No	All

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Wed. 10:35 AM	**40 mins**	General Session - Individual		Care 360 - Integrated Ambulatory Care Model	The ambulatory care program was conceived as a $250M-$300M initiative based on one IPD team delivering dozens of clinics over a multi-year time frame thru creation of a proprietary lean operating model, a sustainable LEED alternative called “Healthy Spaces Road Map” and with a Kit of Parts for standardization and maximizing prefabrication. The outcome after three years of implementation and continuous improvement has resulted in a high efficiency delivery process exceeding expectations.	Jeff Niesen, The Boldt Company; Scott Nelson, Advocate Health Chicago; Michael Doiel, HDR Architecture	**The Business Case for Lean**	Advanced	WB2	300	Salon GK	No	All
Wed. 10:35 AM	**40 mins**	General Session - Individual		Why Projects Excel - Great design enabled by Lean	Building on the success of the 2016 LCI sponsored owner study focused on why projects excel and the owner business case for lean construction LCI has sponsored a follow-on study focused on design professionals. Similar methodology of comparing best vs typical projects as well as evaluation against LCI framework will be conducted along with metrics geared to design firms to establish a benchmark of performance as well as identify impact of lean methods.	Stan Chiu, HGA; Bevan Mace, Balfour Beatty; Michael Murray, The Beck Group; Andrea Sponsel, HKS	**The Business Case for Lean**	Fundamental	WB6	300	Platinum 7-10	No	All
Wed. 10:35 AM	**40 mins**	General Session - Individual		Show me the money! A tale of nine breakdowns and nine breakthroughs. Striving vs. surviving	The OWNER, The ARCHITECT, and THE GENERAL CONTRACTOR: Thriving vs Surviving in an ILPD project. What others can learn from us sharing our struggles and how we overcame the challenges with our first ILPD project. 9 (or should we say 99) breakdowns on the way to a successful ILPD project. This presentation will be recorded.	Karin Henderson, Cone Health; Eric Thomas, HKS Design; David Wyatt, Brasfield & Gorrie	**Lean Interventions Challenges & Transformations** **Owner Interest**	Intermediate	WB1	300	Salon E	No	All
Wed. 10:35 AM	**40 mins**	General Session - Individual		Children’s Specialty Hospital Makes Child’s Play Out of Owner-Led, Integrated Approach	Detroit Medical Center embarked on a journey to build a new Children’s Hospital of Michigan facility to serve suburban residents. The facility was envisioned to create a healthcare facility bringing CHM’s experts from downtown to the suburbs in a facility that was unmistakably designed for kids. To accomplish this goal, a strong team of professionals with endless dedication to collaboration would be essential.	David Jaeger, Harley Ellis Devereaux (HED); Doug Dulin, Simpler Consulting an IBM Company	**Leveraging Lean in Planning & Design**	Fundamental	WB3	300	Salon A-D	No	All
Wed. 11:25 AM	**40 mins**	General Session - Individual		Lean Design: Mock-ups, Simulation, and Design for Prefabrication	Successful integrated project delivery (IPD) teams go to great lengths during the design phase of a project to extract what the owner values. Beyond the typical user group meetings, what other ways are there to engage the end user and create a more functional building design? The PennFirst team used a variety of advanced techniques including full scale foam mock-ups, simulations, fully finished mock-ups, and virtual reality. PennFirst is a team comprised on Penn Medicine, LF Driscoll/Balfour Beatty JV, BR+A, HDR, Foster + Partners, and Southland Industries completing the Penn Medicine – New Patient Pavilion project in Philadelphia, PA.	Timothy Williams, Southland Industries; Stephen Greulich, Penn Medicine; Daryl Bodewin, HDR; Ed Hanzel, LF Driscoll Company, LLC	**Leveraging Lean in Planning & Design** **Owner Interest**	Intermediate	WC5	300	Salon F	No	All
Wed. 11:25 AM	**40 mins**	General Session - Individual		From Zero to 60 – A Lean Journey in the Fast Lane	This session will tell the story of how 45-year-old Skiles Group quickly transformed from a traditional, “old school” GC firm to a Lean leader in their industry. The presenting team will share steps of the evolution, from a philosophical shift inside leadership to infusing Lean throughout the corporate culture – which ultimately tripled the firm’s project volume in only three years.	Keyan Zandy and James Eastham, Jr., Skiles Group	**The Business Case for Lean**	Intermediate	WC3	300	Salon GK	No	All
Wed. 11:25 AM	**40 mins**	General Session - Individual		Collaborative Design and Scoping	The Collaborative Design and Scoping (CDS) process is a means to engage the integrated delivery team to confidently develop an early and reliable promise for the project Scope, Cost and Schedule and other Target Values. The CDS process provides a decision-making framework to uncover and align Owner value and the specific Scope that will be required. Unique to the CDS process is the focus on unambiguous Scope definition and Ownership that creates the foundation for flow based production management of the design and construction process. The CDS discussions not only uncover value, but build a deeply shared understanding of what will be build, how it will be built and why it will built that way. The CDS process has developed over a 20 year span with a robust track record of providing early cost certainty, high levels of innovation and a truly exceptional degree of participant satisfaction. The CDS process is a big engine in the TVD process.	John Strickland and Jeff Loeb, CH2M	**Leveraging Lean in Planning & Design**	Fundamental	WC1	300	Salon A-D	No	All
Wed. 11:25 AM	**40 mins**	General Session - Individual		People, process and technology driven change: Examples from the State of Louisiana’s First Segmental Bridge Project	Construction innovation typically requires successful combination of people, processes and technology. If elements are lacking, innovation initiatives often fail. This session presents the outcomes of a transformative lean and process improvement initiative using real-time location sensing technologies. The case study involves the construction of a large segmental bridge and interstate interchange project where the contractor identified the opportunity for process improvement to be empowered by technology. The strategy 1) defined an optimal pull planning schedule and work sequence with the field teams (people). 2) examined labor, vendor, equipment and other process improvements (process), and 3) deployed innovative real-time location sensing technologies to provide real-time feedback on production and casting milestones (technology). The approach improved production by over 100% and proves how technology, processes and people driven initiatives can deliver powerful workflow optimizations.	Guy Skillett, Rhumbix; Terry Brickman, PCL	**Technology & New Techniques in Lean**	Fundamental	WC6	300	Platinum 7-10	No	All

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Wed. 11:25 AM	**40 mins**	General Session - Individual		Integrated Design & Delivery Planning Tool	As IPD continues to expand in use, it's apparent there's a growing need for more advanced means of aligning the project stakeholders' responsibilities, improving the integrate work flows, and achieving the owner's desired outcome. Rather than adding another tool, it became clear that ONE method could be used throughout the project lifecycle to support those goals, as well as, design management, TVD, SBD, Continual Cost Modeling, Scheduling, Change Management, Procurement, Submittals, advanced work packages, commissioning, training and handover, and follow on FM.	Chris Pechacek, McCarthy Building Companies, Inc	**Lean Interventions Challenges & Transformations**	Advanced	WC4	300	Platinum 1-4	No	All
Wed. 11:25 AM	**40 mins**	General Session - Individual		Fabrication Shops Lean Turnaround	Over a year ago we began the process of consolidating our four fabrication shops so they would all be underneath one roof, losing 30,000 SF overall. Through the use of 5s, the 8 wastes, value stream mapping and flow mapping we were able to successfully integrate all of our fabrication shops. The team that led the transformation consisted of shop foremen, shop hands, and superintendents. With simple changes to our staffs mindsets and adjustments to our flow we were able to increase overall productivity even though we are now in a smaller space. The biggest change has been in the shop hands view of waste, the elimination of waste and fixing what bugs them is now a part of their culture. This presentation will be filmed.	Gary Lovewell, Robert Linsday and Curtis Schwartz, Southland Industries	**Field-Driven Lean**	Intermediate	WC2	300	Salon E	No	All
Wed. 12:15 PM	**60 mins**	**Meal**		**LCI Awards Luncheon**	LCI will present the LCI Pioneer Award and the LCI Chairman's Award to two deserving individuals.	None	None	None		TBD	Marquis - Plenary Room	No	All
Wed. 1:15 PM	**40 mins**	General Session - Individual		Creating a LEAN Workflow with Technology and Prefabrication	The 101 Million dollar Iowa Events Center Hotel project, located in Des Moines Iowa is a 330 room full service Hilton flagship hotel. As the Owner and Developer of the Private Public Partnership (PPP) project, The Weitz Company set out to assembly a team with experience whom embrace "Lean" to ensure the Des Moines Community a highly successful hotel . During the initial planning of the project, Weitz specifically looked at the market conditions of the skilled workforce, and how our 10-year Lean journey could be amplified with technology and prefabrication. The results of our upfront planning lead The Weitz Company to procuring a fully coordinated model to increase self-perform work efficiencies through lift plans, layout, fabrication, and as-builts. Our focus on utilizing the model as our coordination effort lead to the company entering into its first POD construction of bathrooms. After getting buy-in from the project's key subcontractors, prefabrication lead us to focus on a "nothing hits the floor" safety program and a concentrated effort from each subcontractor on how they could improve their portion of work. Some of these ideas included prefabricated Mechanical and Electrical room kits, prefabricated wall sections, precut drywall, stocking the floors to eliminate a buck hoist and small-batching deliveries to reduce onsite congestion.	Ben Bunge and Bob Andersen, The Weitz Company; Jim McCulloh, DSM Convention Hotel LLC; Curt Baker, The Waldinger Corporation	**Technology & New Techniques in Lean** **Owner Interest**	Intermediate	WD2	300	Salon G-K	No	All
Wed. 1:15 PM	**40 mins**	General Session - Individual		Behavior Based Project Delivery – Shingo Model Thinking Leads a Team to Rethink What's Possible	• The Shingo Model and Shingo Prize is the global standard for Operational Excellence and the gathering place for top Lean thinkers. • LCI is promoting The Shingo Model (learning events at Congress) yet nobody has adopted the Model to pursue project delivery. We are changing that.• The project model is based on the Shingo course – "Discover Excellence" – translating learning from 2016 Congress to project deployment. • KPI's cannot be achieved with KBI's (Key Behavior Indicators) – these will be the very best (and influential) Leading Indicators a project has ever used.• We are using the Shingo's First Insight of Enterprise Excellence – "Ideal Results Require Ideal Behaviors".• We will share how the UCSF Block 33 project is different – primarily by gathering the largest collection of the extended value stream ever to sees things differently, apply Lean principles, and commit to the behaviors necessary to achieve excellence. This presentation will be filmed.	Nicholas Masci, Haley & Aldrich; Patricia Andre Tillman and Patrick McGee, University of California, San Francisco; Baris Lostuvali, Webcor Builders; Marianne O'Brien, SmithGroupJJR	**Lean Interventions Challenges & Transformations**	Advanced	WD1	300	Salon E	No	All
Wed. 1:15 PM	**40 mins**	General Session - Individual		Lean IPD for $10 Million or Less, Small Project Implementation in Healthcare	You are still more likely today to hear about the mega-project's use of Integrated Project Delivery than the smaller projects. Although the big projects usually command all the attention, small projects make up a majority of the project landscape across the country. This presentation will focus on a large healthcare system located in Chicago and its' first two IPD projects utilizing an Integrated Form of Agreement with a focus on the unique challenges in implementing the ILPD tools from the big jobs to the $10M and less scale for a new ground-up building and an interior hospital renovation. The panel of presenters will include representatives from the Owner's perspective, the general contractor and other consultants and subcontractors. The contracting method used on both projects was very similar and two different teams were used. The Owner's Representative has worked for this client for numerous years on all capital project needs. This will allow for real world examples showing the progress being made by using the IPD tools. The panel will share their stories of success and failure in trying to leverage the knowledge of how lean tools on the big jobs can be right-sized for these first IPD implementations.	John Zachara and Todd Jabaay, Integrated Facilities Solutions, Inc.; Josh Odelson, Power Construction	**The Business Case for Lean**	Intermediate	WD4	300	Salon AD	No	All

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Wed. 1:15 PM	**40 mins**	General Session - Individual		Think Small and Win Big	Having an owner (Sutter) who fosters a culture of innovation and collaboration. The culture made it into field and through production planning the team produced great results. Setting Daily Targets and communicating to crews/project with a "Bluebeam" drawing produces great results. Taking small "Batches" into the field. Getting the crews to think "small" produces "BIG WIN!"	Tony Lowe, Southland Industries; Tom Minard, Sutter Health; Mike Rangel, The Boldt Company	**Field-Driven Lean** **Owner Interest**	Intermediate	WD5	300	Salon F	No	All
Wed. 1:15 PM	**40 mins**	General Session - Individual		"Go Slow to Go Fast": How Exeter Hospital Successfully Used Lean Principles To Structure a Pre-Design Study Of Inpatient Care	This presentation will explore how an architecture firm utilized lean techniques to lead, Exeter 2020, a pre-design study intended to make the subsequent design process more efficient and effective. Using the principle of 'Go Slow to Go Fast', Exeter Hospital commissioned TRO to lead a team of nurses, doctors, technicians, managers, and planners on an exploration of current inpatient care models and innovations. The purpose of the study is to create a shared understanding of the design options and develop a body of research to inform better decision making during design. The team implemented a continuous improvement driven framework for the investigation. The four main steps of the study - Learn to See, Explore, Analyze, and Decide - align with the PDSA cycle. These steps provided a structure for the team to explore the current state of their existing inpatient units and the target state of improved patient experience, better outcomes and reduced expenses. The Toyota A3 problem-solving process served as the basis for the entire study; other lean tools used include clearly defining the problems to be solved, gap analysis, gemba walks, 5-why root cause analysis, and plus/delta examination.	Dennis Stone and Leigh Snow, TRO; Robert Corson, Exeter Hospital; Chee Keong Lin, SmithGroup JJR	**Leveraging Lean in Planning & Design** **Owner Interest**	Intermediate	WD3	300	Platinum 1-4	No	All
Wed. 1:15 PM	**40 mins**	General Session - Individual		When Life Deals You Lemons: Adjusting Your Way to a Lemon Drop	We have all worked on projects that hit rough patches and leave us feeling a little sour. We are faced with two paths to take: continue down the sour path and risk the negative impact on your project, work life, and home life, or choose to make adjustments to the current situation and travel down the sweeter path.	Bernita Beikmann and Andrea Sponsel, HKS, Inc	**Lean Interventions Challenges & Transformations**	Intermediate	WD6	300	Platinum 7-10	No	All
Wed. 2:05 PM	**55 mins**	General Session - Lean Lab	**Lean Lab 3**	Applying Lean Thinking to Interior Design	Whatever its size, the interior design of a hospital is incredibly complex, involving thousands of decisions and products. It's not just about furnishings and materials, but their integration with the architecture and engineering, application and installation, operations and maintenance, safety, infection control, equipment, supply chain, code compliance and costs. The Van Ness & Geary Campus Hospital Integrated Project Delivery Team, working with 20+ trade partners, used Lean techniques to help manage that complexity on a billion-dollar, multi-campus project. Key members of the interiors team will share how the use of IPD principals and Lean tools such as TVD and Last Planner helped the team develop the typologies and space hierarchies that were necessary to guide the design concept and budget for nearly a million square feet of space. Lean requires a much different approach than interior designers are used to, requiring that decisions be made earlier in the design process than is typical. Through the use of P3 problem-solving, swarming, pull planning and target cost, the design team is able to decide on interior details, materials and pricing in order to inform the integrated team and users of the design intent and its clinical, experiential, and monetary value.	Paul Klemish, HerreroBoldt; Kathryn Dunn,SmithGroupJJR; Kent Hetherwick, SmithGroupJJR; Helen Bronston, SmithGroupJJR; Jayme Hissam, Sutter Health	**Leveraging Lean in Planning & Design** **Owner Interest**	Intermediate	WE1	100	Exhibit Hall	No	All
Wed. 2:05 PM	**55 mins**	General Session - Lean Lab	**Lean Lab 3**	Building the Project Playbook with Level of Development	Traditional project delivery incentivizes uncoordinated behavior by tying firm compensation to the firm's performance, rather than project outcome. Non traditional project delivery methods and business models are evolving that use both new technologies including 3D computing and Lean process change. The Integrated Project Delivery IPD approach engages a cross functional teams of design professionals and specialty contractors at the project validation phase of a project. As a result, there are new processes required to manage both the internal and external planning and traditional design workflows. It has been recognized by by those that have embraced a more concurrent and integrated workflow that this way results in projects with more predictable outcomes and that deliver the most value to the owner and ultimately building users. This "product development" approach to design requires a reboot for all involved in a truly integrated project delivery approach. The speakers will discuss how BIM execution planning can be used to establish a valuable playbook for design deliverables and guide the entire project team in prioritizing work flow and deliverables that fulfill the information flow and timing of downstream users. They propose a Project implementation strategy that establishes a project "playbook" based on the Level of Development (LOD) as published by the AGC BIMForum. The BIMForum definitions of LOD are used in the context of the project lifecycle and creates a framework which all stakeholders, owners, designers and builders can work with. These guidelines are intended for both design/build and IPD projects.	Ralf-Uwe Modrich and Bruce Cousins, AIA, SWORD Integrated Building Solutions	**Leveraging Lean in Planning & Design**	Intermediate		100	Exhibit Hall	No	All

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Wed. 2:05 PM	**55 mins**			Social Science Tools for Discovering True Customer Values	Traditional Lean tools and techniques offer a great way of collecting explicit and quantitative customer values, however, it is often the implicit experiential customer values that truly drive decision making. Take coffee selection for example; customers describe their values in terms of taste and price, however, those same customers consistently choose Starbucks over McDonalds for coffee despite McDonalds superiority in both of those explicit customer values. Consumer decision making is actually being driven by experience values. See how we use techniques from the social sciences to uncover those implicit but more powerful customer values.	Eric Peabody, Taylor Design; Rob Williamson, Taylor Design; Jen Leonard, Taylor Design	**Leveraging Lean in Planning & Design**	Intermediate		100	Exhibit Hall	No	All
Wed. 2:05 PM	**55 mins**			Design Phase Mapping - Aligning Goals and Defining Deliverables	What's the Problem: The typical design phase process of standard SD, DD, and CD type of deliverables does not hold up when speed and efficiency are required. This is typically seen when non-standard delivery type projects are engaged such as Design-Build and IPD. Expectations by the various stakeholder groups are largely out of alignment and the design process quickly divulges into a reactive race to meet deliverable deadlines. What's the Solution: By implementing pull-style process planning at project inception you will be able to align goals and milestones between all parties involved. Each phase of the design should be outlined as to what is being developed, what will need to be completed, what design packages are to include and when they are expected, where pricing activities occur, and where VDC can fit into the process. Design phase milestones should not be determined by dates in a schedule, but by completion of key activities. Each of the phases of design will be collaboratively mapped out in a pull style series of events incorporating needs and expectations from the Owner, Design, and Construction groups. This class will focus on the Design Phase Mapping process and why it's a positive disruption to the typical design process that we've seen and dealt with for years.	Megan Conrad and Chase Prepula, Ryan Companies US, Inc.	**Leveraging Lean in Planning & Design**	Intermediate		100	Exhibit Hall	No	All
Wed. 2:05 PM	**55 mins**	General Session - Panel	**Panel 18**	How good is good enough? The productivity paradigm	The last planner system provides an excellent foundation for collecting productivity data directly from the field. The PPC metric is easily understood and timely. Productivity data is valued as the foundation organizational learning and the quality of the data is paramount to the realization of continuous improvement. Lean Managers deploy various training and control mechanisms to stabilize the consistency and objectivity of the reported data. Still, the reported productivity data is not concrete but subjective in nature. The relentless expectation of high performance levels inevitably leads to reporting bias. This productivity paradigm is a cultural response to system of measure- more is better, perfection is best. While these measures represent the intended outcome of the productivity effort, they are physiologically counterproductive to the value of learning. BIG IDEA: Lean philosophies can be better supported by changing the way we analyze and report the PPC measure.	Dave Bonham, University Colorado Boulder	**Field-Driven Lean**	Intermediate	WE2-A	300	Salon AD	No	All
				Direct Observation: the benefits to the client of implementation	Volume of construction work that is not adding value (over 80%) and how direct observation can improve this to 34% Added Value, giving a 100% improvement in productivity	Avril Behan and Brian Clare, Dublin Institute of Technology; Gerry Walsh, Mercury Engineering	**Field-Driven Lean**	Intermediate	WE2-B	300	Salon AD	No	All
Wed. 2:05 PM	**55 mins**	General Session - Panel	**Panel 3**	Solving the Innovator's Dilemma - Leveraging Lean Innovation	The Innovator's Dilemma, by Clayton Christiansen (1997) predicted the disruptive nature of technology to fundamentally change the nature of business competition. The intersection of ubiquitous smart portable devices, improvements in wireless connectivity, and the increasingly low cost of new hardware like Drones, Laser Scanners, IOT, and Augmented Reality devices have created a disruption tipping point for the entire Architecture, Engineering, and Construction (AEC) industry. The ability to effectively approach the adoption and utilization of these disruptive technologies will be the key indicators of successful businesses and projects in the immediate future.After researching the fundamental tenants of the Lean process and approach across several industries (including manufacturing and construction), we have concluded that the most effective framework for overcoming "The Innovator's Dilemma" is by implementing Lean Innovation.Lean Innovation is a delicate balance between Technology (which is constantly changing), Process (influenced by adversarial incentives or outdated standards), and People (the biggest variable of them all).We will show that by leveraging Lean principles in the adoption and utilization of innovation on either a project or corporate level, already has, and will continue to invariably yield an increasingly expansive competitive advantage.	Uchenna Okoye, Skanska Building USA; James Pease, Sutter Health; Laurie Spitler, Autodesk Inc.; Nathan Wood, SpectrumAEC	**Technology & New Techniques in Lean** **Owner Interest**	Intermediate	WE3-A	300	Salon F	No	All

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Wed. 2:05 PM	**55 mins**			A Presentation on the Continuance of the Development and Implementation of a Mechanical and Electrical Construction System to Transform Traditional Construction Methods into a Modern Process of Assembly	This presentation discusses the continuance of the development and implementation of a construction system developed to transform tradition construction methods for mechanical, electrical and public health (MEP) systems into a modern process of assembly. The system was developed for implementation on a large complex hospital project in the UK and its outcomes are presented in a number of published research papers.Since its implementation, the methods have been applied to large water treatment facility constructed in rural Queensland, Australia, and more recently to elements of a large hospital project in downtown Montreal, in the province of Quebec, Canada.The presentation outlines particular aspects learned from each of the implementation efforts and sets a platform of understanding that can be informative to the LCI community in terms of its adaptability and usefulness to the industry.	Peter Court, LaingO'Rourke	**Technology & New Techniques in Lean**	Advanced	WE3-B	300	Salon F	No	All
Wed. 2:05 PM	**55 mins**	General Session - Panel	**Panel 11**	Being Lean in a Non Lean World	Understanding and knowing how to practice and implement lean in an organization or project that is not. Not every project team or organization understands or values lean practices. This presentation will cover concepts and give real examples of how to be as lean as possible in your given environment. This happens by understanding the different stages of being lean and choosing the appropriate behaviors for the situation.	Jeremiah Sugarman, Milly Christmann and Steve Wilson with HMC Architects	**Leveraging Lean in Planning & Design**	Fundamental	WE4-A	300	Platinum 1-4	No	All
Wed. 2:05 PM	**55 mins**			Leveraging Lean Processes in a Design Build	Lean processes are not just for IPD teams and projects under IFOA contracts. Teams implementing Lean in design-build projects and pursuits and making good use of these collaborative process. Selecting the right team members are not just about fees and resumes. See how one team used CBA's in the selection of its team leading to a winning of a design-build net zero project.	Steven Wilson, HMC Architects; Justin Maletic, Balfour Beatty	**Leveraging Lean in Planning & Design**	Intermediate	WE4-B	300	Platinum 1-4	No	All
Wed. 2:05 PM	**55 mins**			Utilizing waste walks to drive root cause problem solving	KHS&S started its Lean journey in 2012, with a focus on field engagement. Our strategy has been streamlining our foremen and superintendents commitment to the jobsite workforce, in order to reduce waste and increase productivity to balance cost, schedule, and quality. Focused waste walks (gemba walks) have been introduced to drive closer observations of work performance and to document areas of struggle. Establishing areas of struggle have led to focused problem solving projects. KHS&S will present our tactical and strategic approach to conducting waste walks on a job site and the benefits of implementing this program. This presentation will be filmed.	Michael Villar, KHS&S Contractors	**Field-Driven Lean**	Fundamental	WE5-A	300	Salon E	No	All
Wed. 2:05 PM	**55 mins**	General Session - Panel	**Panel 15**	Video Time Case Studies for the Installation of Curtain Wall Systems	The increasing implementation of Lean Construction principles in projects requires the researchers and industry members to perform of scientific studies, which illustrate the benefits of using Lean principles in the field. With this study, the researchers will present the results of a field-driven experiment, which focused on the analysis and removal of waste through the use of video studies, process modeling, and 4D modeling. In this experiment, the researchers worked with superintendents and field workers to record the installation process of facade systems for an office building. After the video recording and on-site interviews, the team process mapped the installation and identified various types of wastes, which caused the installation to run inefficiently. Based on this analysis the team was able to identify that the installation could save over $65,000 and over a week of field work. The team then simulated and validated the new proposed process through a 4D simulation. Therefore, with this experiment, the team wants to illustrate how the implementation of Lean Principles and, most importantly, input from the field can have direct impacts on project and overall schedule and budget.	Fadi Castronovo, CSU Eastbay; Nawar Awad, BENSON INDUSTRIES INC	**Field-Driven Lean** **Owner Interest**	Intermediate	WE5-B	300	Salon E	No	All
Wed. 2:05 PM	**55 mins**	General Session - Panel	**Panel 21**	Monthly Metric Report - HCA's Business Case for Lean	From the owner's perspective, we want to bring to the surface the issue of adding measurement and accountability to the lean practices that we have implemented. Being relatively new to the lean community, HCA Design and Construction (D&C) department felt that it was a challenge to introduce accountability and results to the use of lean construction practices,	Ken Kulaga and Natasha Moore, HCA	**The Business Case for Lean** **Owner Interest**	Intermediate	WE6-A	300	Salon GK	No	All
Wed. 2:05 PM	**55 mins**			The Rise of Big Data	Big Data provides Impartial Prediction and Analysis. Impartial Analysis provides knowledge needed to improve Set-based Prototyping, Choosing-by-Advantages, and Target Value Setting/Tracking. From quickly predicting space requirements and construction costs to evaluating a project's final design & cost efficiency vs market averages, Big Data does it all. This presentation will be filmed.	Jayme Couchene, The Boldt Company; Mark Sands, Performance Building Systems & Catalyst LLC	**The Business Case for Lean**	Intermediate	WE6-B	300	Salon GK	No	All

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Wed. 2:05 PM	**55 mins**	General Session - Individual		Gemba Training 1	The subject matter of this 55-minute program is What is Gemba and more particularly, How to do a Gemba Walk? It will be presented using a multimedia of PowerPoint and custom videos and reinforced by interactive group exercises, questions and discussions. The intent is to introduce the basic mechanics of a Gemba Walk and its link to continuous process improvement. It will center on better understanding the current state of value streams; bridging the gap between management, planning and the frontline work; enhancing how to look at work and talk to workers; analyzing and managing waste and resources and raising awareness of efficient job site organization and visual management. Agenda: - Tell the story behind this presentation - Clarify objectives - Explain Gemba and Gemba Walk - Observe actual Gemba Walk video - Summarize value, value stream and value creators - Compare and contrast Modern Management vs. Lean Management - See how to bridge horizontal gaps of the supply-chain and vertical gaps of organizations Outline the eight wastes (DOWNTIME) and the seven categories of resources (TIMMESS)	Rich Seiler, Unified Works; David Olson, W. B. Olson, Inc.	TBD	TBD	WE7	300	OC 2-4	No	All
Wed. 2:05 PM	**55 mins**	General Session - Panel		State of Research in Lean (LCI Research Committee)	Want to know what Lean research is being done in the U.S. and abroad? Please join the LCI Research committee for brief presentations on specific areas of research (safety, cost models and workflow) followed by panel discussion and questions from the audience about research on a wide range of Lean topics. Hear from experts on what we know, pressing research questions and future opportunities.	Safety and health hazards - David Grau, Arizona State University Workflow - Iris Tommelein, University of Cailfornia, Berkeley Cost modeling - Glenn Ballard, University of Cailfornia, Berkeley moderator- Renee Cheng, University of Minnesota			WE8	300	Platinum 7-10	No	All
Wed. 2:05 PM	**190 mins**	General Session - Panel		Advanced Lean Practitioners Forum		Jessica Kelley, Southland Industries	TBD	Advanced		50	OC 1	No	Invite-Only
Wed. 3:00 PM	**30 mins**	**Other**		**Exhibit Hall Networking Break**		None	None	None			Exhibit Hall	No	All
Wed. 3:30 PM	**40 mins**	General Session - Individual		Simplifying the Complexities of an Old World Project by Applying Alternative Lean Techniques	Dimeo's New Haven team has been presented with an impressive challenge in construction what is presently the most complex masonry project in the country; the project demands attention, precision, passion, and strategy from all members involved - from the laborers in the field to the craftsmen producing hand-carved ornamental stone. The design of the masonry facade is historical in theme and calls for elements that many masons will experience, but once in a lifetime. With 70,000 custom shaped bricks, 436 custom stone ornaments, 600+ stone profiles, and in excess of 1.8 million bricks, 50,000 pieces of cast stone and limestone, the facade is nearly 1.5 miles long. On any given day, the 140+ masons are laying out jack arches, coordinating stone delivery from afar, building skyward on one of six towers, setting one of 45 chimneys, or putting the finishing touches on a prefabricated groin vault. Orchestrating such a profound assortment of material and manpower in an efficient manner requires not only diligence, but also calls for implementation of Lean Practices. The team employed fabrication for passageways and chimneys just-in-time delivery for most custom stone, reduced batch sizes to eliminate waste and increase predictability, scheduled "daily huddles" to improve communication with other trades, and organized weekly production meetings to reduce schedule variation. Through these efforts, are only a sampling of many Lean Practices available for use, they have indeed proven worthwhile to Dimeo internally and also eye-opening to the trades involved. It is refreshing to see a talented craftsman setting hand-carved stone on a building that will – when complete – appear to have been in its place for hundreds of years. To see that same craftsman with a trowel in one hand and an iPad on his hip offers even more encouragement. The capstone, though, is to experience that craftsman in a daily huddle of in a production.	Paul Aballo, Blair Oliver, Jared Novinski and Andy Schiff, Dimeo Construction Company; Jon Olsen, Yale University	**Field-Driven Lean**	Beginner	WF3	300	SalonGK	No	All
Wed. 3:30 PM	**40 mins**	General Session - Individual		Built to Last: How Sutter Health Assembled a Collaborative, high-performing IPD Team	How to build an IPD team ready to withstand the challenges of a large multi-phase hospital construction project. The "Big Idea" we want to present is the "increased relatedness" of the project participants.	Michael Lehman, EwingCole; Muhsin Lihony, Lionakis; Shane Freeno, Sutter Health; Pete Novaresi, The Boldt Company	**Lean Interventions Challenges & Transformations** **Owner Interest**	Intermediate	WF4	300	Platinum 7-10	No	All

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Wed. 3:30 PM	**40 mins**	General Session - Individual		Lean Design: Cracking the Code	Leveraging Lean in the construction phase has been well known to increase value for the owner by reducing waste and rework. The design process fundamentally relies on iteration and parallel explorations of multiple options - some would say this inherently "wasteful" yet those processes have the potential to generate enormous value for the building outcomes. Because of the perception that Lean is in opposition to open-ended design exploration, designers are less aware of Lean's potential. In this session, three architects will discuss how value in design can be achieved with current and new roles of the architect in the construction process. Find out how owners, contractors and trade partners can support designers to best achieve Lean design.	Renee Cheng, University of Minnesota; Mackensie Skene, NBBJ architects; John Haymaker, Perkins + Will Architects	**Leveraging Lean in Planning & Design**	Fundamental	WF5	300	Salon E	No	All
Wed. 3:30 PM	**40 mins**	General Session - Individual		3-2-1 Scrum	Scrum is framework within which people can address complex adaptive problems, while productively and creatively delivering the highest possible value. Scrum is an iterative & incremental management method to get work done very fast and is also very lightweight. This presentation is designed to get individuals comfortable with Scrum and able to use it before the end of the working session.	Felipe Engineer-Manriquez, McCarthy Building Companies	**Technology & New Techniques in Lean**	Fundamental	WF1	300	Salon A-D	No	All
Wed. 3:30 PM	**40 mins**	General Session - Individual		Results: Align to Deliver	After 18 years with Toyota, I have had the opportunity to learn more about the construction cycle over the past five years with Allegion, a security solutions provider. I would like to cover Hoshin Kanri, or Strategy Deployment and how to effectively engage project teams toward common goals.	Eric Moore, Allegion	**The Business Case for Lean**	Intermediate	WF6	300	Salon F	No	All
Wed. 4:20 PM	**55 mins**	General Session - Lean Lab	**Lean Lab 4**	Mobile Big Room - Collaboration on Wheels!	LCI's "The Business Case for Lean" study proves that Big Rooms make a difference. Yet they are on a small fraction of projects. A modular company, on a Lean Journey, is changing that with help from Steelcase, the most recognized name is office environments. We are providing a Mobile Big Room, a space that assures a safe environment, empowers & involves everyone, and promotes visual management. Industry data shows that greater than 90% of all commercial projects are less than $5M. These projects don't have the resources for a "compound" but still benefit from Lean construction. Our answer is to rethink the mobile trailer. Gone is the shabby trailer with two measly offices - replaced by a high functioning space that is making a difference with project teams.	Nick Masci, Haley & Aldrich; Cliff Cort, Triumph Modular	**Technology & New Techniques in Lean**	Intermediate	WG1	100	Exhibit Hall	No	All
Wed. 4:20 PM	**55 mins**			Data-driven visualization to reduce complexity and support lean construction implementation	Project management are becoming more complex due to ever increasing amount of data generated and communicated between project stakeholders. Overcoming the challenge of having too much data requires effective visualizations to reduce complexity. This presentation will focus on concepts, best practices and workflows of using data-driven visualizations in a large scale IPD project that proved to be an effective method to communicate construction processes/workflows as well as progress status of fabrication, delivery, installation and inspection across the IPD Team. The lessons learned suggest that standardization of data collection and reporting by the General Contractor helps reduce wastes due to duplicated effort for project parties in processing and reporting data. In addition, data-driven visualization was proved to make supply chain progress become transparent and help eliminate risks due to inconsistent data interpretation and communication between project participants.	Hung Nguyen and Karl Jeppesen, Herrero Builders; Leonard Sielewicz S.E., uniNimbus Group	**Technology & New Techniques in Lean**	Intermediate		100	Exhibit Hall	No	All
Wed. 4:20 PM	**55 mins**			Choosing by Advantages: LPS e ToolSelection	Our company was looking to improve implementation of Last Planner System on our construction projects. Software companies have adapted Last Planner System and created electronic pull planning / Last Planner System supporting tools and had been noticed by several of our lean practitioners. A multi-divisional team formed and evaluated four firms using Choosing by Advantages to select the best fit to enter a national agreement with. We found out that selecting the software tool wasn't the biggest challenge.	Felipe Engineer-Manriquez, McCarthy Building Companies	**Technology & New Techniques in Lean**	Intermediate		100	Exhibit Hall	No	All
Wed. 4:20 PM	**55 mins**			LEAN Lawyering—Crashing through barriers no one thought efficiency could penetrate	Using lean techniques (full kitting; pull planning; 8 wastes in contract negotiation) to show how Legal can adopt LEAN thinking to support a LEAN business, and how we can align commercial terms to support rather than frustrate business intentions. Providing two specific legal practices typically fraught with waste, I'd look to educate stakeholders to ask better questions of their own lawyers.	Jonathan Head, Balfour Beatty	**Technology & New Techniques in Lean**	Intermediate		100	Exhibit Hall	No	All

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Wed. 4:20 PM	**55 mins**	General Session - Panel	**Panel 2**	How 3D Model Coordination Eliminates Risks from Challenging Healthcare Renovations	The impact of healthcare reform and limited opportunities for large capital expenditures have prompted hospital owners to explore projects that retrofit and update aging facilities to meet the changing needs of their patients and staff. While renovation projects may save money and time compared to new construction, there are significant risks and challenges in dealing with complicated site conditions and achieving uninterrupted hospital functionality. One such project is the Alta Bates South Wing Renovation project, which is scheduled to build three programmatically distinct sub-projects (Dietary Department, MRI Suite, and Dr's Lounge) within a 25,000 SF contiguous existing ground floor of the 1978 Merritt building at the Alta Bates Summit Medical Campus in Oakland, California. 3D Model integration and coordination has been critical to remove potential risks that stem from existing constraints prevalent in aging healthcare facilities. Undocumented existing conditions on site, the need to design new extensive MEP systems with low existing floor to floor heights, site adjacencies to highly active, complex spaces, and the need to adhere to a strict compliance schedule are all factors common in healthcare renovation work. Through model based workflows, it was possible to identify structural conditions and existing MEP systems not represented in as builts, and to analyze how to site complex medical equipment such as MRI units to avoid interference with other systems and equipment. This ability to identify risks through 3D model coordination, both in existing conditions and design, in present and future states, is crucial to a successful renovation project in healthcare.	Shurid Rahman, Sutter Health; Brett Paloutzian, HED Architects; Matthew Jogan, Ghafari Management Services, Nicholas Grage, IntegraBIM	**Technology & New Techniques in Lean** **Owner Interest**	Intermediate	WG2-A	300	Salon F	No	All
Wed. 4:20 PM	**55 mins**			How a 4D Time Machine can Benefit Your Lean Project	Many projects are benefiting from 3D BIM models, but have not taken the next step to leverage the powerful fourth dimension of time. This interactive session will provide participants with a hands-on demonstration of how Synchro is currently benefiting the MUSC Children's Hospital in Charleston, SC. We will explore how this efficient tool has enhanced communication and participation among all parties. By reviewing time lapse footage of the future, our teams have been able to collaboratively solve problems well before they occur. 4D scheduling has captured many issues that normally fly under the radar of conventional scheduling tools. Using a brand new hardware interface, called the 'Time Machine', we will explore actual 4D models from this project and analyze them together.	Jennifer Lacy, Christena Holcombe, Steve Moore and Bill Stevens, Robins & Morton	**Technology & New Techniques in Lean**	Advanced	WG2-B	300	Salon F	No	All
Wed. 4:20 PM	**55 mins**	General Session - Panel	**Panel 6**	Implementing Lean Principles and Visual Management Technologies in Facilities Management Systems	A North West England University's Estates and Property Services (E&PS) department was directed to transform the way they provided Facility Management (FM) services. They entered in to a departmental transformation effort labelled 'lean approach' with 'value added' directives. It was noted that E&PS employees were not educated in what lean meant and needed a lean visual management intervention. Therefore, a lean visual management workshop blitz artefact was developed to introduce lean principles, concepts, and visual management technologies. This presentation details Estates and Property Services lean journey efforts and challenges and what transpired before and after the lean visual management workshop blitz. Several other visual management artefacts were designed and introduced with and without success. FM is all about people, places, technology and processes and procedures. The success of any FM services department depends on employees and customer expectations, and their willingness to take the baton and follow thru with it.	Audrey Schultz, Pratt Institute	**The Business Case for Lean** **Owner Interest**	Intermediate	WG3-A	300	Platinum 1-4	No	All
Wed. 4:20 PM	**55 mins**			Leveraging Lean Construction to Gain Trust, Speed, and Profitability in the Semiconductor Construction Industry	The semiconductor market is forecasted to grow from $335 billion to $347 billion in 2017 according to figures from World Semiconductor Trade Statistics (WSTS). This highly competitive industry is dominated by four major manufacturing players:• Intel Corporation – U.S.• Taiwan Semiconductor Manufacturing Corporation (TSMC) - Taiwan• Samsung – South Korea• GLOBALFOUNDRIES – U.S.Between 2010 and 2015 the major four competitors constructed, rebuilt, and installed billions of dollars of construction in an effort to be the first to deliver the next technology node (currently 14nm). In the U.S. alone there were 6 Fabs (fabrication plants/foundries) under construction between 2011 and 2013 totaling $9.8 billion dollars of construction (SEMI Fab Futures 2014 edition). Time to market with the latest technology is crucial as every month of delay equates to a millions in loss in revenue. Conversely, compressing the time to first silicon by just 45 days can yield $1.5 billion dollars of additional revenue over the lifetime of a product as illustrated in Dr. Robert Leachman's "Engineering of Speed" (2016 UC Berkeley Abstract). In 2016, GLOBALFOUNDRIES made a bold move and determined to "jump" technology nodes to 7nm employing a process still under development known as Extreme Ultraviolet (EUV). The EUV tools are being installed in their 14nm manufacturing foundry FAB 8 in Malta, New York. By doing so, GLOBALFOUNDRIES Facility Design and Construction (FDC) Group advocated the continuation of their Lean Construction journey; furthering the strategic partnerships established in 2015 with the M+W Group, Danforth Mechanical, Gross Electric, and Total Facility Solutions (TFS).The journey began in 2015 when constrained by a tight schedule and a limited budget to build a Program critical Central Utility Building GLOBALFOUNDRIES and M+W Group turned to Lean Construction principles and practices to meet the Program goals:• An Integrated Project Delivery contract strategy• Target	Alexander Finale, Globalfoundries; Nathan Speanburg,M+W Group; Jose Garcia-Aranda, Total Facility Solutions	**The Business Case for Lean** **Owner Interest**	Intermediate	WG3-B	300	Platinum 1-4	No	All

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Wed. 4:20 PM	**55 mins**	General Session - Panel	**Panel 7**	Agile Values, Lean Process with "Design" in the middle	Design Process, Documentation and the management of that process, has not kept pace with the changes in technology or the ability to gather and analyze data. Data gathering and analysis is almost completely unknown in the architectural community, yet its application to successful design while capturing client values and efficient model and document production is critical. Advances in rapid software application development over the past 30 years has addressed problems of: priority and requirement changes, task (story) time estimation, internal testing and error catching as well as customer feedback. Application of software management techniques, along with lean practices such as Target Value Delivery can aid in the development of design, architectural models and documentation. With the collection of data along the way continuous improvement might "just be possible" during the design process. The result is hopefully: better risk management, a closer fit to client expectations and a more buildable project	Marc Chavez, Perkins + Will	**Leveraging Lean in Planning & Design**	Intermediate	WG4-A	300	Platinum 7-10	No	All
Wed. 4:20 PM	**55 mins**			Agile Methods in Design	As you probably know, lean and agile both spring from the Toyota Production Method, and, thus, share many common features. However, agile developed in the software industry, where it has become the dominant production paradigm. My big idea is this: Agile is a better framework to use during design than the conventional lean canon because it implements short iteration cycles, team autonomy, visual management, and continuous improvement, plus it embraces change rather than resisting it.	Todd Henderson, Boulder Associates □	**Leveraging Lean in Planning & Design**	Intermediate	WG4-B	300	Platinum 7-10	No	All
Wed. 4:20 PM	**55 mins**	General Session - Panel	**Panel 14**	IPD 2.0 – Not All Projects Are Created Equal	In 2011 Banner Health along with HKS, WSP/CCRD and DPR set out on Banner's first venture into Integrated Project Delivery in the design and build of Phase 2 of the Banner MD Anderson Cancer Center. The project saw great successes and many lessons learned as the team learned the benefits and differences of managing an IPD project. On the heels of this success this same team was asked by Banner to lead a new Emergency Department / Surgery expansion along with the design of a 16-story tower at its flagship campus Banner University Medical Center – Phoenix. The team quickly learned that not all IPD projects are created equally as the urban setting and aged facility presented a new set of problems that were not originally accounted for. This presentation will set out to discuss the IPD process; its scalability and flexibility needed to be successful from project to project from project definition through construction.	Ryan Ferguson and Kelly Carlin, DPR Construction; Steve Eiss, Banner Health	**Lean Interventions Challenges & Transformations**	Intermediate	WG5-A	300	OC 2-4	No	All
Wed. 4:20 PM	**55 mins**			Going Integrated on Hard Bid Work at UC Davis	A great majority of work in institutions of all kinds is smaller, hard bid renovation work, often involving legacy mechanical, structural and electrical systems. Building on the principles used in an award-winning structural upgrade the prior year, the project team and UC Davis collaborated on an upgrade to the kitchen/dining commons that serves over 2M meals per year to drive lean principles and tools in the field to facilitate learning and collaboration on the kind of critical campus upgrade project that rarely makes the magazines. Using Lean Principals through design and construction produced results which provide a business case for using Lean.	Angela Bowman and Paul Tate, The Boldt Company; Pat Derickson, Stafford King Wiese Architects	**Lean Interventions Challenges & Transformations**	Intermediate	WG5-B	300	OC 2-4	No	All
Wed. 4:20 PM	**55 mins**	General Session - Panel	**Panel 17**	Empowering the Tradesworker - Lean in the Field	Our project is an IPD project where we brought on 10 of our large trades early to become trade partners. Since the inception of the project we have felt the importance of properly onboarding every member of our team. Since commencing construction our team has realized the importance of proper onboarding of the trades workers, our frontline agents of innovation and change. We have found that by empowering the tradesworker with knowledge of Lean Construction as they are on-boarded they feel motivated to perform better, innovate, and become a contributing member to the project team. Our onboarding and recognition system has been so successful that our project, working with the Safe Build Alliance, has generated 27 Best Known Methods as the remainder of the industry in Oregon has produced just one. We want to introduce others to our three tired method of successful onboarding sessions; from the frontline trades, to the next level foremen, and finally our supervisory training,	Kyle Becker, McCarthy Building Companies; Darren Toy and Brad Barcroft, Andersen Construction	**Field-Driven Lean**	Fundamental	WG6-A	300	Salon AD	No	All
Wed. 4:20 PM	**55 mins**			Winning Hearts, Minds, & Hands. A Lean Culture in Action!	The University of Arizona Bioscience Research Laboratories is located in a high-profile area. Site Logistics, operations, and campus community relations is the most important and most challenging part of this project. The Owner needed a synchronized work force that is in tune with the circumstances of the building location.Getting anything done comes down to clearing the path, providing clear instructions, and motivating the action. Synchronized action was required by not only the designers and DPR management team, but all the extended partners and workers onsite. To create this culture, we will show how the jobsite team cleared the path by supporting lean with buyout and contracts. Clear instructions were provided through training and onboarding. Very strict rules for safety, cleanliness, quality, and lean behaviors were implemented to motivate the team, in addition to a great interactive culture of respect and best in class bathrooms, lunchrooms, and jobsite amenities. We will also showcase how touring the project and showing off the work of the team sustained the culture.The session will conclude with a, "lessons learned" examination of what worked and what we would change to improve our processes.	Jason Schroeder and Jake Smaellie, DPR Construction	**Field-Driven Lean**	Intermediate	WG6-B	300	Salon AD	No	All

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Wed. 4:20 PM	**55 mins**	General Session - Panel	**Panel 19**	Leveraging an Integrated, Lean Project Delivery Team to Deliver Reliable Production System in Construction	Background• The Van Ness and Geary Hospital project in San Francisco is a 1 Million sq. ft. quaternary care hospital project constructed in the center of the city. The construction included demolition of a 9 story hotel, excavation and shoring 80 feet down into the ground, and erecting the new 240 foot tall hospital. The project has a field work force peaking at 900 workers, and required over 4 million worker hours to build.• Unfortunately there is a lot of unproductive and out of sequence work performed in the construction industry with associated waste and rework.• Construction schedule reliability is typically hampered by stacking of trades and low commitment reliability. Motivation• Make construction personally rewarding - ONE team, Lean IPD culture, ONE building.• Having trade partners optimize the whole in lieu of a system or scope of work.• We have an aggressive schedule, and need a predictable, reliable and trackable production plan to deliver this complex hospital • To raise the bar on commitment reliability, worker safety, and manpower utilization.• We are financially motivated, have an opportunity to share in production shared savings.Big Idea• Build a understanding of production and culture with every company and individual member of the Integrated team – where everyoneo is respected,o has a voice in developing conditions of satisfaction for production,o takes ownership in developing the production plan by negotiating batches of work, agreeing to quality and completeness of hand-offs, and committing to flow, o Understands what train car they fit into, and the sequence and work areas.o Knows the manpower required to be reliably deliver their train.o Performs weekly reflections for continuous improvement,o Is transparent in reporting production hours weekly and sharing challenges and learning's.	Steve Yots, The Boldt Company; Klas Berghede, HerreroBoldt; Tom Secada, California Drywall Corporation; Ron Heise, Southland Industries; Jeannie Austin, Sutter Health	**Field-Driven Lean**	Fundamental	WG7-A	300	Salon G-K	No	All
				From resist to embrace: a veteran superintendent leads Lean changes	I have been running work in the field for over 30 years and have led some of my company's most challenging projects in the Western Region - many of which are larger than $200M. It wasn't until I was asked in an interview by a potential client about what I did that was Lean that I realized I had nothing to offer. Not wanting to lose another project, I decided to start my Lean journey on a design/build, $300 million Federal Courthouse project with the GSA. I had personal resistance to change. I also had the challenge of implementing Last Planner System (LPS) on a team new to the system and many skeptics. With video commentary of Trade Foremen, this story provides a transparent look at how implementing LPS is received by those who use it. This story provides insight on how a veteran Superintendent can benefit from taking ownership of LPS implementation, and transforming resistance into embracement on their project.	Greg Groleau, Clark Construction Group	**Field-Driven Lean**	Fundamental	WG7-B	300	Salon G-K	No	All
Wed. 4:20 PM	**55 mins**	General Session - Individual		Gemba Training	The subject matter of this 55-minute program is What is Gemba and more particularly, How to do a Gemba Walk? It will be presented using a multimedia of PowerPoint and custom videos and reinforced by interactive group exercises, questions and discussions. The intent is to introduce the basic mechanics of a Gemba Walk and its link to continuous process improvement. It will center on better understanding the current state of value streams; bridging the gap between management, planning and the frontline work; enhancing how to look at work and talk to workers; analyzing and managing waste and resources and raising awareness of efficient job site organization and visual management. Agenda: - Tell the story behind this presentation - Clarify objectives - Explain Gemba and Gemba Walk - Observe actual Gemba Walk video - Summarize value, value stream and value creators - Compare and contrast Modern Management vs. Lean Management - See how to bridge horizontal gaps of the supply-chain and vertical gaps of organizations Outline the eight wastes (DOWNTIME) and the seven categories of resources (TIMMESS) This presentation will be filmed.	Rich Seiler, Unified Works; David Olson, W. B. Olson, Inc.	TBD	TBD	WG8	300	Salon E	No	All
Wed. 5:30 PM	**3 hours**			LCI Corporate Member Reception - Napa Rose	LCI corporate members can enjoy drinks, light hors d'oeuvres and good conversation at the Napa Rose in Disney's Grand Californian Hotel. LCI corporate members are able to add the reception at the Napa Rose to their registration for an additional cost. 1313 Disneyland Dr, Anaheim, CA 92802								
General Session - Thursday, Oct. 19													
Thu. 6:45 AM	**45 mins**	**Lean Coffee/Meal**		Lean Coffee/Breakfast	Lean Coffee is an organized meeting. Participants gather and build an agenda to discuss lean related topics. The discussion is focused and productive because the agenda for the meeting is generated by the attendees. To benefit most from the time, be on time and plan on participating for the entire session.		None	None	LC2	TBD	Marquis - Plenary Room	SOLD OUT	All

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Thu. 7:45 AM	**15 mins**	General Session		Congress Welcome/Opening Remarks		Mark Konchar, Balfour Beatty, LCI Board Chair	None	None	T2PS	TBD	Marquis - Plenary Room	No	All
Thu. 8:00 AM	**45 mins**	General Session		Keynote - Elizabeth Fikes	Elizabeth Fikes is proud to be an Engineer at Procter & Gamble for over 20 years. She has worked in the US and China leading global and regional organizations on initiative launches, engineering project execution, process development, and supply chain design. She is skilled at building capability to deliver breakthroughs in innovation and project execution. Her current role is to enable our 2000+ P&G Engineers to deliver projects with excellence across our business sectors - Fabric & Home Care, Beauty, Health& Grooming and Baby/Family/Feminine Care. She holds BS and MS Engineering degrees from the University of Illinois.	Elizabeth Fikes, Director, Product Supply Engineering – Cincinnati, Procter & Gamble	**Owner Interest**	None	T3PS	TBD	Marquis - Plenary Room	No	All
Thu. 8:45 AM	**60 mins**	General Session		Owner's Perspective Panel	This session has three industry leaders from companies who have experienced the benefits of implementing lean in their core business. They will articulate their expectations from the design and construction industry and discuss opportunities and challenges.	Moderator, Victor Sanvido, Southland Industries Elizabeth Fikes, Director of Product Supply Engineering, Procter & Gamble Mandy Hansen, Director, Facilities Planning, Design and Construction, Seattle Children's Hospital Karin Henderson, Executive Director of Strategic Management, Cone Health	**Owner Interest**	None	T4PS	TBD	Marquis - Plenary Room	No	All
Thu. 9:45 AM	**30 mins**	**Other**		**Networking Break in the Exhibit Hall**		None	None	None		TBD	Exhibit Hall	No	All
Thu. 9:45 AM	**30 mins**	**Lean Coffee**		Owner's-only Lean Coffee			**Owner Interest**	None		50	Grand Ballroom JK	No	Owners-only, Invite-only
Thu. 10:15 AM	**40 mins**	General Session - Individual		Successful Use of Lean Tools During Design - IPD or Not!	The Lean Construction process provides an incredible opportunity to use Lean tools during the planning and design phase. Designers and builders have myriad opportunities during this time to implement Lean tools that make the end product more efficient and reliable for all parties. While some seem to think it can only happen in an IPD environment, there are incredible examples of how Lean tools help us all accomplish our goals regardless of delivery method. Some of the tools used in the two environments that will be discussed are: Big Room, Lean workstructuring vs. constructability, prefabrication, CBA, TVD, daily huddles, Last Planer, and pull planning.	Alex Gregory and Mark Linenberger, Linbeck; George Montague	**Leveraging Lean in Planning & Design** **Owner Interest**	Intermediate	THA5	300	Platinum 7-10	No	All
Thu. 10:15 AM	**40 mins**	General Session - Individual		Leveraging the Lean Advantage: Union Partnership	Far too often, Construction Managers are training subcontractor foremen in Lean principals, often multiple times to the same subcontractor due to changing foremen and new projects. Shawmut Design and Construction is partnering with the Rhode Island Building and Construction Trades Council to assist training their membership in Lean principals and, in particular, the Last Planner System, thus creating workers that come prepared to the projects with this training and knowledge.	Joubin Hassanein and Doug Pilkuhn, Shawmut Design and Construction	**Field-Driven Lean**	Intermediate	THA4	300	Platinum 1-4	No	All
Thu. 10:15 AM	**40 mins**	General Session - Individual		Last Planner Road Show - A Grass Roots Effort within an Organization	Are you interested in engaging more people in your company in last planner, but not sure where to start? Using a comprehensive case study, this presentation will illustrate through a grass roots effort how a few individuals within a large company made a positive lean impact. The case study will address how the team developed a last planner system training, challenges that arose, and where they plan to go from here.	Brent Jordan, Jeff Betts, Kate Edwards and Sean Noonan, Whiting-Turner	**Lean Interventions Challenges & Transformations**	Intermediate	THA2	300	Salon CD	No	All
Thu. 10:15 AM	**40 mins**	General Session - Individual		13 Days from Subcontractor Invoice to Money in the Bank: How the VNGC IPDT Streamlined the Invoice Approval and Payment Process	Background• The Van Ness and Geary Hospital project in San Francisco is a 1 Million sq. ft. quaternary care hospital project constructed in the center of the city. The project budget is $1.4 Billion, with monthly billings topping $35,000,000.• The construction industry suffers from notoriously slow payments – with many subcontractors feeling the pain of 90 to 120 day payment delays• Slow payments hurt small and medium size contractors – firms that do not have the deep pocket banking arrangements and/or cash reserves• The VNGC Hospital project is being delivered with and Integrated Agreement between HerreroBoldt, Sutter Health and SmithgroupJJR. The combined leadership is committed to streamlining work processes and lean project delivery.Motivation• Cash Neutrality! Reduce the stress associated with negative cash flow resulting from waste throughout the invoice approval and payment value stream.• Respect for people – and all of our partners in the IPDT• Eliminate waste at every stage of the payment process – saves money.• Facilitate small and medium sized local business participation• Increase goodwill and obtain improved collaboration.Big Ideas• Focus on the billing and payment process to identify waste and systematically implement improvements to streamline and improve.• Work with all participants: CMGC, Subs, Vendors and the Owner to understand what provides value and trust, vs what is waste, and then collaboratively develop protocols that streamline the payment process.• Value stream mapping and lean process development	David Thomack and Karen Conrod, The Boldt Company; Panos Lampsas, Sutter Health	**The Business Case for Lean** **Owner Interest**	Intermediate	THA1	300	Salon AB	No	All

2017 LCI Congress - 19th annual agenda
Oct. 16-20 | Anaheim, Calif.
Wed-Thu General Sessions | Mon-Tue Training Days | Fri Gemba Day

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Thu. 10:15 AM	**40 mins**	General Session - Individual		Lean from an Arts Perspective	Lean is much more than a set of process tools. Lean is a way to design human relationships and conversations in an enterprise and on a project as well as improve work processes. Lean thinking has largely been interpreted through the perspective of engineers and social scientists. May 10 to 12 this year twelve professionals from the arts will be immersed in Lean thinking, and then asked to to interpret and observe Lean thinking through the "eyes" of an artist. The expectation is that this three-day workshop will yield fresh observations about how we design not only the work, but also our relationships to better support Lean practices during the design and construction of buildings.	Tom Richert, Lean Project Consulting; Joanna McGuffey, Unconventional Works	**Lean Interventions Challenges & Transformations**	Advanced	THA3	300	Salon F	No	All
Thu. 10:15 AM	**40 mins**	General Session - Individual		The Power of the "Makigami Wall" to solve problems in Organizations or Projects	The "Makigami Wall" enables teams to better identify and evaluate opportunities for improvement as it guides them to focus on effectiveness and efficiency at the same time. This methodology provides a holistic understanding of continuous improvement that cannot be obtained with A3 reports only. The construction in industry has not been introduced to this methodology that is the catalyst for continuous improvement, systemic thinking and the development of lean culture in organizations or projects. This presentation will be filmed	Paulo Napolitano and Jamie Cruz, Herrero Builders Inc.	**Technology & New Techniques in Lean**	Intermediate	THA6	300	Salon E	No	All
Thu. 11:05 AM	**55 mins**	General Session - Lean Lab	**Lean Lab 1**	Transforming Organizational Cost Management	Effective cost management is the backbone of a healthy organization. Utilizing a spectrum of lean tools and techniques, XL has undertaken robust initiative in 2017 to optimize cost management across the entire business. This endeavor utilizes: 1) current state process mapping of the 11 business processes most tightly related to cost management, 2) development of communities of practice, 3) analysis and optimization of those processes, and 4) a series of short-interval hacks and kaizens to improve and embed certain aspects of a process. The resulting outcomes will not be limited to just improved cost management, but also include greater awareness across all functional areas regarding their impact to cost management, a culture of continuous improvement and agile development of solutions, and a repeatable process to be utilizes on future organizational goals	Maricela Quibelan, XL Construction; Andreas Phelps, The Collective Potential	**The Business Case for Lean**	Intermediate		100	Exhibit Hall	No	All
Thu. 11:05 AM	**55 mins**			But How Do I Know I Couldn't Get It Cheaper?	Introducing the concept of Integrated Project Delivery nearly always leads to the question of "but how do I know I'm not paying too much if I don't get competitive bids"? Collaboration and competition are not mutually exclusive. The IPD process, effectively led, not only retains the benefits of competition, but in many ways can enhance them. Owners do not need to choose between the advantages of competitive selection and the many types of cost saving innovations enabled by IPD.	Del Profitt and John Strickland, CH2M	**The Business Case for Lean**	Fundamental		100	Exhibit Hall	No	All
Thu. 11:05 AM	**55 mins**			Building and Expanding our Lean Culture – How 2015 strategic decisions in our NW division provided notable and measurable results for 2016 and beyond	Rosendin Electric has been a pioneer in Lean construction for over 15 years. We have 30 operating divisions within the organization. A case study follows about our NW division (2016 revenues of $225M) and addresses recent Lean Construction improvements, centering on expanding the Lean Culture. In 2013, the NW division had implemented some Lean methods in limited areas with tangible success; and in November of 2015, a decision was made to strategically up the investment in Lean. An important part of our division's strategy was to continue to support the corporate wide Lean emphasis while identifying what Lean methods would work best for our division. We chose to make our highest priority to be a higher level of investing in the building or expanding of our Lean Culture. The right way for our division involved a variety of methods, communications, sessions, leadership involvement and more. This presentation will indicate how our division implemented a series of steps to both improve the division's Lean Culture and also achieve tangible results that helped: • Enable a stronger top and bottom line• Enable a safer place to work• Enable a lower costs for our customersThis presentation will show how substantially building on a Lean Culture was done in our division and will share some of the tangible positive results	Glenn Patterson, Tim Moore and Michelle Doyle, Rosendin Electric	**The Business Case for Lean**	Intermediate	THB1	100	Exhibit Hall	No	All
				Effective Construction Planning - Then vs. Now. Comparing today's best lean practices to effective planning from a decade ago	Lean Planning is a time investment that can change the way we work, not just how we schedule projects.	Neal C. Ernest and Todd Stewart, Balfour Beatty	**The Business Case for Lean**	Intermediate		100	Exhibit Hall	No	All

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Thu. 11:05 AM	**55 mins**	General Session - Panel	**Panel 5**	How To Lead with Lean in the Field: The JGO Project	Background: The project, J.G. O'Donoghue Building Restack, is a 3 storey occupied renovation for government employees in Edmonton AB. The project is worth $32 M and due to the nature of the schedule has required phased tendering. In fact, design is still not 100% completed at this stage. Construction started in the fall of 2016 and will complete in the fall of 2017. The building contains contaminated materials, which require even more care since the building is partially occupied during construction.Motivation: With a CM at risk contract, a large government client, occupied space, extremely tight schedule to move occupants back into offices, design not complete at the start of construction, sustainability requirements and limited site area, Lean became one of the only options for us to be able to successfully navigate through this project.Big Idea: Lean in the field is successful when you put together training and support for the field. This encompasses facilitation support, Lean training, alignment of values of owner along with team, empowerment of the superintendent and site staff, 2 Second Lean improvement, and measuring values alignment. Although in-depth Lean participation is easier to maintain on an IPD project, we can show how this was successfully fostered on a CM at risk project.	Jen Hancock, Chandos Construction; David Owen, Chandos Construction; Hugh Phillips, Chandos Construction	**Field-Driven Lean**	Fundamental	THB2-A	300	Platinum 1-4	No	All
Thu. 11:05 AM	**55 mins**			Streamlining Field Operations	Background Motivation:The value stream of field production isn't defined purely by putting work in place as scheduled. The work must be performed safely, and at an acceptable level of quality to the client. As a company, safety is and has been core to our delivery of work. A formal quality program exists, but was developed separate from safety. Last planner/sequencing of work added to the top creates three silos of programs for field management. The challenge is to get teams to think of these three as one during weekly work planning, 6 Week Look Aheads, Daily Stand Ups, etc. We are trying to remove waste from the value by integrating the right discussions. There is also a large amount of documentation and monitoring of safety, quality, last planner, and customer advocacy items that is asked of our field staff. Many of these items have overlapping questions and documentation requirements. We were tasked with integrating the field management systems and identifying and eliminating waste in the workflow of field operations.Big Ideas:Streamlined field management system that leads with safety, builds in quality, cost controls, and uses Last Planner to ensure a steady workflow. Integrated roadmaps to lead project teams through the field of safety, quality, and LEAN practices.	Kassi Colman, The Wietz Company; Derek Bixby, The Weitz Company; Karmyn Babcock, The Weitz Company	**Field-Driven Lean**	Intermediate	THB2-B	300	Platinum 1-4	No	All
Thu. 11:05 AM	**55 mins**	General Session - Panel	**Panel 8**	Using Lean Coffee as a tool for building an engaged workforce	Many companies struggle with workforce engagement and building a culture that retains the best talent. Many lack the flexibility to implement change rapidly or fail to leverage their most important asset—their own employees (this is one of the eight forms of waste – underutilized human resources). This presentation will walk through what Lean Coffee is, how its implementation can help build a positive culture focused on continuous improvement that retains great employees, and share a window into Skender's journey with Lean Coffee.	Joe Pecoraro, Skender Construction LLC; Colleen O'Brien, Skender Construction LLC	**The Business Case for Lean**	Intermediate	THB3-A	300	Salon AB	No	All
Thu. 11:05 AM	**55 mins**			Reorganizing to deliver Lean solutions to our Customers	In 2015, McGough Construction, a 61-year-old family-owned construction management firm, committed to its Lean transformation journey to provide a Different and Better Experience to our Customers, Deeper Engagement of our People, and to serve as a Platform for High Quality Growth. This presentation will summarize how McGough's transformation has led to reorganizing the company around our primary market sectors. Market sector teams are now being led by a Value Stream Management Team assuring that we deliver a "One McGough" experience to our customers. To further engage our people in the transformation, we have empowered all levels of the organization in Daily Improvement. The Daily Improvement methodology focuses on attaining our company's Vision of 100% Value-Added Services, Zero Defects, Respect for People, and On-Demand Delivery. The Last Planner System is one of the tools we are utilizing to help deliver 100% Value-Added Services and On-Demand Delivery. McGough's Team of Last Planner Facilitators are supporting our projects from Award (including Preconstruction) through Owner Occupancy.	Tim Nagle, McGough Construction; Jeff Dzurik, McGough Construction; Matt Wagner, McGough Construction	**The Business Case for Lean**	Intermediate	THB3-B	300	Salon AB	No	All
Thu. 11:05 AM	**55 mins**			The Battle for Change	A case study of launching our Small Wins program company-wide using (1) the ADKAR model to tap into the people side of change and (2) the Road to Mastery to set achievable targets in order to gauge whether change was successfully adopted within the organization.	Courtney Dvorak, Sabrina Odah and Taylor Tomaszewski, The Boldt Company	**Lean Interventions Challenges & Transformations**	Advanced	THB4-A	300	Salon CD	No	All

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Thu. 11:05 AM	**55 mins**	General Session - Panel	**Panel 9**	Scaling Lean from the construction division to the organization, how to sustain the transformation	From 2010 to 2014, Andrade Gutierrez, a major Brazilian contractor, adopted a "Tool approach" to scale lean to the whole operational area, where lean specialists were responsible to lead isolated kaizen events. From 2014 to 2016, we changed our approach and focused on building a lean culture inside the construction division. “Structural kaizens” were conducted to create the consensus and define the main process standards.Starting 2017, we identified that critical areas of the company (people management, strategic planning, business development, etc.) had been left behind and defined a strategy to “onboard” the entire organization. We have transformed our lean processes and mindset in a system that includes the whole organization.	Mehdi El Manssouri, Glaucia Regina Alves da Costa and Deisa Connegundes, Andrade Gutierrez	**Lean Interventions Challenges & Transformations**	Fundamental	THB4-B	300	Salon CD	No	All
Thu. 11:05 AM	**55 mins**	General Session - Panel	**Panel 12**	Lean and Prefabrication Success: Case Study of Harvard Life Lab	Lean Interventions, Challenges & Transformations: We would like to share this story of a challenging project and the Lean techniques that were leveraged successfully, particularly as it pertains to prefabrication. This is a fantastic case study of modular construction of a complicated lab building for Harvard Business School. This presentation will be filmed.	Joubin Hassanein and Dennis Riley, Shawmut Design and Construction; Nathaniel Finley, Shepley Bulfinch; Cliff Cort, Triumph Modular	**Technology & New Techniques in Lean**	Intermediate	THB5-A	300	Salon E	No	All
Thu. 11:05 AM	**55 mins**			MEP Rack Manufacturing Kaizen	After an initial investigation into Off Site Manufacturing in the UK in 2009, as well as several years of MEP rack manufacturing for Florida healthcare projects, Harper Building Systems (a subsidiary of Limbach Facility Services) dove deep into Lean Manufacturing in the shop. A series of kaizen events focused on manufacturing within the shop, utilizing time studies, U-Cell Manufacturing techniques, and applying shop personnel improvement ideas to drive continuous improvement into 2D & 3D rack design, manufacturing and installation. With the Healthcare Corporation of America’s (HCA) support for the exercise, the team is applying the approach to a standardized building design, Free Standing Emergency Rooms, and capturing metrics on three different approaches, 1.) “Stick Built”, 2.) Pre-Kaizen Rack Manufacturing, 3.) Post Kaizen Manufacturing. The story is both about implementation of lean manufacturing techniques in the building services shop environment as well as instilling a culture of continuous improvement in the shop through the Hearts & Minds of the individuals. This presentation will be filmed.	Kevin Labrecque, Harper Building Systems (Limbach Facility Services); Justin Brockenbrough, Harper Building Systems (Limbach Facility Services); Stephen L. Gibson, I.C. Thomasson Associates, Inc.	**Lean Interventions Challenges & Transformations**	Intermediate	THB5-B	300	Salon E	No	All
Thu. 11:05 AM	**55 mins**			The Kanban Board Method in Lean Design Management	There is a search for a better way to manage design schedules in the early phases of design. Managing a Design Schedule or Knowledge work has come into focus with the use of alternative forms of project delivery. Weather Design/Build or Integrated project delivery (IPD) project teams are challenged to find better practices and tools to manage work to improve flow of design decisions.This presentation will discuss an approach that uses Last planner and combines it with a Kanban board to visualize work flow and build a “pull system” for design decisions. This presentation will discuss the practical issues that are faced by the design team and why managing the design schedule requires a different approach than the construction schedule. We will describe how to translate from the Pull Plan to a Kanban Board. We will offer a practical exercise of preparing a Kanban Board. We will discuss Work In progress WIP and how this approach facilitates reprioritization of design decisions.	Bruce Cousins and Ralf-Uwe Modrich, SWORD Integrated Building Solutions; Eric Van Den Berg, Interstates Engineering	**Leveraging Lean in Planning & Design**	Intermediate	THB6-A	300	Platinum 7-10	No	All
				Closing the Gap: Engineering Site Services	Existing gridlines were not fit-for-purpose for setting out in high-tech, space-constrained facilities	Avril Behan and Brian Clare, Dublin Institute of Technology; Robert Hughes, Jones Engineering	**Leveraging Lean in Planning & Design**	Fundamental	THB6-B	300	Platinum 7-10	No	All
Thu. 11:05 AM	**55 mins**			Designing and Building a Lean Project Mentoring Culture	Everyone on a building project is a knowledge worker. Project team leaders have an opportunity to better leverage knowledge on the project by deliberately designing and building a mentoring culture. Two teams working on Cleveland Clinic projects are participating in a program specifically designed for Lean project teams. Both leadership teams through this program are crafting mentoring approaches with the intent of building a smarter workforce while also significantly advancing their understanding of both Lean practices and the specific work for which they are responsible.	Tom Richert, Lean Project Consulting; Gina Casalinova, Cleveland Clinic; Bryan Wahl, Bostwick Design Partnership	**Lean Interventions Challenges & Transformations** **Owner Interest**	Intermediate	THB7-A	300	Salon F	No	All
Thu. 11:05 AM	**55 mins**			DOJO Teach Yourself to Train Your Mind	For some time, the Cleveland Clinic has been engaged in Lean learning, including a focus on mentorship. This spring two Cleveland Clinic project teams participated in a program to establish a deliberate project wide mentoring practice. This panel discussion investigates the effects of	Hal Macomber, Macomber Consultants and Calayde Davey, Arnold Development Group	**Lean Interventions Challenges & Transformations**	Fundamental	THB7-B	300	Salon F	No	All
Thu. 12:00 PM	**60 mins**	**Meal**		**"Meet Your Speaker" Luncheon**	Participants can choose to sit at a table with a presenter and have a lunch and learn opportunity to discuss your burning questions.	None	None	None		TBD	Marquis - Plenary Room	No	All

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Wed-Thu General Sessions | Mon-Tue Training Days | Fri Gemba Day

Day/Start Time	Length	Event Type	Type	Presentation Title	Description (Background, Motivation, Big Idea)	Speaker Name, Organization	Tracks	Level	Session Code	Capacity	Location	Sold Out?	Open To… (All, LCI corporate
Thu. 1:00 PM	**40 mins**	General Session - Individual		Flow Efficiency in Structural Delivery – From Concept Design to the Field	The silo-ing of design and construction specialties is a major source of waste in our industry. Designers often don't consider construction issues in design because "that's just means and methods" and construction trade partners recreate drawings and models based on traditional design documents and rethink early design decisions late in the process resulting in design rework. One of the great opportunities for creating flow efficiency in construction is in the transfer of project data from concept through design to the field. Similarly, by integrating construction thinking into the design process the team ensures things like constructability, labor efficiency, site logistics, and procurement are baked into the design from the earliest stages. This presentation will provide real world examples of structural and enclosure systems integrating design and construction engineering through the full project delivery process. Specific case studies will demonstrate the importance both of people-focused collaborative design processes as well as data-centric digital workflows to transfer building data from design to construction. Examples from the world of sports, themed entertainment, and healthcare show very tangible cost and schedule savings from these lean processes.	Aaron White and Matt Lagusis, Walter P Moore	**Field-Driven Lean**	Intermediate	THC2	300	Platinum 7-10	No	All
Thu. 1:00 PM	**40 mins**	General Session - Individual		Transforming Lean & IPD For A New Industry : Energy & Infrastructure	Use of Lean Integrated Project Delivery has traditionally held a strong tie to healthcare construction, while proponents of this delivery method have long sought ways to engage other Construction owners of the benefits of this methodology. A team composed of a Major Utility Owners and Constructors will share why they believe focusing on the Energy and Infrastructure market segment is a significant opportunity for Lean Construction Practitioners and Owners alike. This presentation will be filmed.	Paul Becks, Roxanne Sedlak and Dr. William Paolillo, Welty Building Co. Ltd.; Ron Ferre and Rich Vavrek, First Energy Corp.	**The Business Case for Lean**	Advanced	THC5	300	Salon E	No	All
Thu. 1:00 PM	**40 mins**	General Session - Individual		When Lean Cultures Converge to Achieve Project Success	Massport, Fennick McCredie Architecture and Skanska USA Building were all at various stages of implementing their own respective Lean cultures when all three entities converged as the client, architect and CM, respectively, on the South Boston Waterfront Transportation Center (SBWTC) project. Despite all three entities entering the project with a fairly robust familiarity with Lean Construction tools and methodologies, that does not necessarily ensure commonality around perceptions, implementation approaches or added value. In this presentation, we will share the lessons learned and best practices derived from the practical application of concepts such as Conditions of Satisfaction, Choosing By Advantage, Target Value Design, Pull Planning and Big Room implementation. We will also specifically discuss how through continuous improvement, the team refined the use of these tools to meet the specific resource needs and challenges for this project.	Michael Zeppieri, Skanska USA Building; Jonathan McCredie, Fennick | McCredie Architecture LTD	**Lean Interventions Challenges & Transformations**	Intermediate	THC6	300	Salon CD	No	All
Thu. 1:00 PM	**40 mins**	General Session - Individual		Reliable Decisions in Design	We want to present the experience of collaborating on design decisions to create a reliable design process in the context of a complex ground up campus project with team members participating remotely across the world. We implemented an innovative design decisions process based on A3 problem solving and Choosing By Advantages (CBA) decision-making method, all connected with a Target Value Design (TVD) approach. The benefits of applying this process are several: reductions to the project budget, increased value through innovations, improved project team collaboration across multiple disciplines. The implementation had to face the challenges of working remotely within a project culture that has not explicitly embraced lean ideals. Benefits realized by various stakeholders: Owner decisionmaking was simplified and accelerated through rigorous application of the A3-CBA-TVD process The project manager had not been exposed to A3-CBA previously, and was a willing, open learner who embraced the process and took ownership of the A3 development meetings The mechanical engineer had not been exposed to A3-CBA previously, and engaged and participated enthusiastically, seeing the value (clear documentation & evaluation of alternatives) the process provides All stakeholders saw the results of long-term coaching - Coach worked with A3 groups for 6+ months to ensure correct application of A3 & CBA thinking Collective engagement in the process fostered increased transparency & trust among project team; process provided structure for understanding constraints & motivations of various team organizations and created a learning and creative mood.	Paz Arroyo and David Long, Lean Project Consulting; Andy Springer, Jones Lang LaSalle (JLL); Daniel Kim, ARUP Engineers	**Lean Interventions Challenges & Transformations**	Intermediate	THC3	300	Salon AB	No	All
Thu. 1:00 PM	**40 mins**	General Session - Individual		Coffee Hour in the Exhibit Hall		None	TBD	TBD	THC1		Exhibit Hall	No	All

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Thu. 1:50 PM	**55 mins**	General Session - Lean Lab	**Lean Lab 2**	Surviving the Big Room	Background:Clark Construction's design build team at the San Diego State University Engineering and Interdisciplinary Sciences Project used the big room concept as a selling point to the University for how the team was going to streamline construction, both on the project management side and the field supervision side. In theory, having all partners; GC, major scope subcontractors, the construction manager, and the inspectors working together daily in the same room for the entire duration of the building construction and closeout is an environment created for success:- no wasted time making phone calls to people you may not get a hold of- instantaneous confirmation - near complete transparency from foreman to owner - higher "quick setup" meeting flexibility- higher FPY/(100% CA) verbal and written communication; transferable work products that pass from field to office without wasted interpretation or translation timeProblems can't hide for long... In theory, it's the most ideal work environment that can be created.....Reality is a different storyMotivation:The motivation is to make this system work because it should be the most ideal work environment that can be created. Everyone should be afforded the collaborative advantage- without the growing pains.Big Idea:Share the tips how to make the collaborative environment work.	Kyle Green, Clark Construction Group; Al Kirsininkas, O'Connor Construction Management, Inc	**Lean Interventions Challenges & Transformations**	Intermediate		100	Exhibit Hall	No	All
Thu. 1:50 PM	**55 mins**			Using a Lean Approach in Your Lean Implementation - Getting Better Results from Your Lean Efforts	In our efforts to implement lean thinking and practices on our jobsites and in our organizations we all have limited time and resources. As we pursue different initiatives, are we ourselves using the same lean approach that we are promoting? Are we pursuing the initiatives that will produce the best results? Two lean leaders from PCL Construction will discuss how they turned the tables on themselves and have reshaped their approach to lean implementation and the better results they are getting by "walking the walk", using lean thinking to improve their lean program.At the beginning of our lean journey, we saw lean as a better way to execute projects. In our minds, that largely meant using certain tools. Sometimes those tools worked. Sometimes they didn't. But, our efforts were not always getting the value that we intended. What we did not realize was that lean is a strategy. As we have come to better understand what "lean" is, we have used the same thinking to make sure we, as lean leaders, are creating a lean approach that meets our customers' conditions of satisfaction and delivers real value.This presentation explains in simple, practical terms what this means for how you create, execute and measure a lean strategy on your projects and within your organization that gets the most value with the least amount of waste. Attendees will come away with specific ideas for improving the effectiveness of their lean program.	David MacKay, PCL Construction Enterprises, Inc.; Ryan Richardson, PCL Construction Enterprises	**Lean Interventions Challenges & Transformations**	Advanced	THD1	100	Exhibit Hall	No	All
Thu. 1:50 PM	**55 mins**			Prefabrication on Hospital Projects: The Good, The Bad, and the Ugly	St. Luke's Hospital Project is an IPD project using the Last Planner system, Takt time planning, visual controls, and prefabrication. The motivation for this presentation is to discuss the benefits, challenges, and lessons learned surrounding prefabrication. This presentation will come how the team used prefabrication for interior framing via a post and panel system, modularized plumbing, and headwalls.	Tom Guardino, Herrero; Jeff Harrison, Harrison Drywall, inc.; Gordon Schaeffer, Southland Industries	**Lean Interventions Challenges & Transformations**	Intermediate		100	Exhibit Hall	No	All
Thu. 1:50 PM	**55 mins**	General Session - Panel	**Panel 4**	"Implementing an Integrated Project Delivery approach for Infrastructure Projects during the execution phase of a project – A Peruvian Case"	The low productivity in construction, as compared to other industries, suggests a need for drastic changes such as the change on current delivery methods. The first author experienced Lean approach when she was working for the largest Peruvian construction company – GyM. This experience allowed her to first hand observe areas that may potentially improve as the team generates better outcomes in the execution phase of a project. In this paper, we will conduct a systematic literature review of the concept of IPD to frame the focus of research and lessons learned and explore the application of the studied concepts across the literature in the case of Peru. This exploration aims to investigate the main challenges and the goals achieved through using an integrated delivery approach compared to conventional delivery methods. We will show and suggest the areas of the research that needs to be implemented for potential addition of value to the clients. The study will explore different dimensions of IPD such as metrics to gauge effectiveness of IPD, collaboration patterns, ownership, involvement of parties that would potentially add greater value and help to achieve the client's business objectives in the case of Peru.As part of the presentation we will be explaining how infrastructure projects are designed for Latin America countries such as Peru, most infrastructure projects will consider operation and maintenance as part of its scope, therefore we will emphasize the use of an integrated approach that includes O&M in its development and presents an auto-sustainable project as a proposal, with the main goal of delivering the greater level of service to the client.	Sulyn Gomez, Purdue University; Paulo Barriga, Graña y Montero Company (GyM)	**The Business Case for Lean**	Advanced	THD2-A	300	Salon AB	No	All

2017 LCI Congress - 19th annual agenda
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Thu. 1:50 PM	**55 mins**			Why the Industry Needs Design-Assist and Lean, With or Without IPD Agreements	The proposed presentation is a panel discussion with Lisa Dal Gallo, Joe Cleves, Joel Darrington, and Joe Leone as the moderator. The presentation will focus on the business case for using Lean Design and Construction, techniques for implementing Lean on a project-wide basis short of full Integrated Project Delivery, and contractual considerations in doing so. The presenters are four construction lawyers with significant experience in implementing Lean, Design-Assist, and IPD on construction projects.	Joseph Leone, Drewry Simmons Vornehm, LLP; Joel Darrington, DPR Construction; Lisa Dal Gallo, Hanson Bridgett; Joe Cleves, Taft Stettinius and Hollister	**The Business Case for Lean**	Intermediate	THD2-B	300	Salon AB	No	All
Thu. 1:50 PM	**55 mins**	General Session - Panel	**Panel 10**	Organizing "Huddles" and Construction Pull Planning to enhance communication and assist Monthly Billing on a large scale IPD Project	PENN Medicine is one of the largest IPD projects currently in construction. The job involves 60+ team members in a collocated space the "CO-LO". The size and complexity of the project demands that the team operates in a lean and efficient manner, communication is rapid and clear and a sustainable feedback loop is established to support an organization. Team incorporated some unique workflows to be efficient. Below are a couple that will elaborated further in this presentation. Weekly "Huddle" to improve communication: • Attributes of huddle (electronic 40ft board) with multiple presenters, 30 mins, teams can work on updating material during the week on (Blue Beam) shared platform. • Use of electronic dashboard for tracking safety, productivity and schedule (outside huddle). TV screens display info in Colo and on site. • Real time data displayed regarding production • Transparency of information • Complementary tools such as Base-camp Production Metrics tracking and accountability • Create a Link/loop between huddle- P6- Last Planner System – Monthly Billing through Textura • Demonstrate how to manage risk with large monthly billings by creating confidence utilizing lean planning techniques Using a mobile and web-based collaboration platform to track commitment within an integrated project team We would like to present on how a mobile and web-based task-centric collaboration platform can help increase transparency, accountability and efficiency among an integrated project team. Commitments between team members are tracked within tasks, which can be linked to relevant project information, prioritized, and tracked until resolution. This is a	Richard Ryan, Penn First; Christopher West, Foster and Partners; Brandon Schein, Aegis Project Controls	**Technology & New Techniques in Lean**	Intermediate	THD3-A	300	Platinum 7-10	No	All
Thu. 1:50 PM	**55 mins**			Using a collaboration platform to manage inspections on an IPD project	We would like to present on how a mobile and web-based task-centric collaboration platform can help increase transparency, accountability and efficiency among an integrated project team. Commitments between team members are tracked within tasks, which can be linked to relevant project information, prioritized, and tracked until resolution. This is a significant shift from more traditional and "siloed" communication methods (paper, phone, emails, etc.).	Stephane Denerolle, Fieldwire; James Pease, Sutter Health	**Technology & New Techniques in Lean**	Fundamental	THD3-B	300	Platinum 7-10	No	All
Thu. 1:50 PM	**55 mins**	General Session - Panel	**Panel 13**	Best Practices for Collaborative Pull Planning of Complex Renovation Work in Manufacturing	Our team is involved in the design/construction of a design-build project for General Motors (GM) to renovate a manufacturing plant while the plant remains in operation. The project involves various re-tooling projects, the construction of a new addition, and the replacement of the two primary transformers that provide the plant with power. Given the complexity and the nature of the renovation, close collaboration was required between the owner's engineering team, the plant, the electrical utility company, the design team, and the construction team stakeholders to plan the execution strategy for this complex renovation. The team employed collaborative pull planning to develop the overall phasing plan for the project then implemented the Last Planner system during work execution. This presentation will highlight a specific area where the combination of detailed collaborative pull planning and the augmentation of visual aids (detailed time-based step-by-step visual representations) proved to be effective to communicate the detailed sequences. This combination allowed us to communicate at the appropriate level of detail with all stakeholders and capture its proper timing and sequence so that the replacement work can proceed with minimal disruption to plant operations.	Samir Emdanat, Ghafari Associates, LLC; Branden Brickles, General Motors; Tim Buckley, Barton Malow Company	**Leveraging Lean in Planning & Design**	Intermediate	THD4-A	300	Platinum 1-4	No	All

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Thu. 1:50 PM	**55 mins**	General Session - Panel	Panel 1	Divide and Conquer - Completing a 23 month schedule in 13 months	"Owner approached CRB with a complex project requiring 23 months in a traditional approach, with the challenge to complete in 13 months. This aggressive schedule forced the team to find a non-traditional approach. CRB decided the way to succeed was early partner engagement. Early engagement reassigned some of the responsibility of detailing and routing process and utility piping and airside ducting. The engineer retained overall system design responsibility. To define dates for deliverables; the schedule was built backwards, or pulled, showing the traditional deliverables would need modification. Combining CRB's PIDs and Plumbing Riser Diagrams with MMC Contractors' routing drawings for systems helped accelerate the permitting process. Allowing MMC to detail the piping helped jump-start the construction while CRB focused on the system design. MMC spent 15,000 hours by the original planned IFC date. Open lines of communication, shared design responsibility and team approach helped reduce time from the traditional approach. Allowing each trade to participate in the design of the systems reduced time for the owner by expediting the schedule. Along the way, the team uncovered several lessons for improvement on the next project, but overall, the team found many positives to prepare them for the next opportunity."	Jeff Tyler and Tyler Bonwell, MMC Contractors; Matt Hoover and Steve Wheat, CRB Builders	**Leveraging Lean in Planning & Design**	Fundamental	THD4-B	300	Platinum 1-4	No	All
Thu. 1:50 PM	**55 mins**	General Session - Panel	Panel 1	Fix What Bugs You – Empowering Tradespeople and Changing a Culture	At Southland, we empower our shop and field tradesmen to implement new processes that improve our inefficiencies. Changing a culture is a grassroots movement, and by encouraging lean thinking and promoting big ideas, we've begun to experience a shift toward adopting a lean culture. Inspired by Paul Akers (Congress 2012) to create a video library, we set up a video competition with monthly and yearly winners, the yearly winner wins a trip to Congress. Our employees are motivated to document their lean processes in a format that can be easily shared across the organization. This practice creates a competitive spirit and inspires an entrepreneurial attitude and lean leadership.	Jessica Kelley, Noah Mellor, Robert Linsday and Navarro Blakes, Southland Industries	**Field-Driven Lean**	Intermediate	THD5-A	300	Salon CD	No	All
Thu. 1:50 PM	**55 mins**			How the Knight Cancer Research Building Project Created a Lean Culture	After attending the 2014 and 2016 LCI Congresses I felt like I got a ton of theoretical lean experience, but I missed the practical "how to implement" the lean concepts in the field. Our presentation will be focused on the Knight Cancer Research Building and the lean in the field items that we tried to implement. We will cover our experience (both good and bad) of what worked, what didn't, and the overall impact these items had on our project.	Jeff Slinger, Andersen Construction; Darren Toy, Andersen Construction; Paul Amort, McCarthy Construction	**Field-Driven Lean**	Fundamental	THD5-B	300	Salon CD	No	All
Thu. 1:50 PM	**55 mins**	General Session - Panel	Panel 22	Successes and Challenges from Using Last Planner System at a major project at Genentech	Learn, Share and Connect with Construction community regarding critical lessons learned from the first application of Last Planner System at two major Capital projects at Genentech. Participants will be able to see with examples both successes and challenges and will leverage those at their projects. This presentation will be filmed.	Yavuz Goktas, Stephan Radspinner and Edward Fitzgerald, Genentech	**Lean Interventions Challenges & Transformations** **Owner Interest**	Fundamental	THD6-A	300	Salon E	No	All
Thu. 1:50 PM	**55 mins**			Implementing Lean methodologies on a $1 billion, multi-national manufacturing program: Lessons Learned from the Field and Beyond	In 2015, GM began significant new construction on four geographically disparate sites across the US and Mexico. Due to the speed required, the need to seamlessly transfer information and knowledge across the program, and the complexity of integration, GM chose to engage Barton Malow Company (BMC) to oversee and execute the entire $1 billion effort as one program, rather than four different projects. GM and BMC engaged management consulting firm, Continuum Advisory Group, in an effort to proactively invest in the development of an integrated program team. Two years later, this discussion amongst the owner, contractor and consultant will provide insightful stories of the integrated team's successes, challenges, and lessons learned on a $1 billion manufacturing program. This presentation will be filmed.	Kelcey Henderson, Continuum Advisory Group; Mike Mayra, General Motors; Jeff Creighton, Barton Malow	**Lean Interventions Challenges & Transformations** **Owner Interest**	Intermediate	THD6-B	300	Salon E	No	All
Thu. 2:45 PM	**25 mins**	**Other**		**Exhibit Hall Networking Break**		None	None	None		TBD	Exhibit Hall	No	All
Thu. 3:10 PM	**40 mins**	General Session - Individual		When Life Deals You Lemons: Adjusting Your Way to a Lemon Drop	We have all worked on projects that hit rough patches and leave us feeling a little sour. We are faced with two paths to take: continue down the sour path and risk the negative impact on your project, work life, and home life, or choose to make adjustments to the current situation and travel down the sweeter path.	Bernita Beikmann and Andrea Sponsel, HKS, Inc	**Lean Interventions Challenges & Transformations**	Intermediate	WD6	300	Platinum 1-4	No	All

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Thu. 3:10 PM	**40 mins**	General Session - Individual		Integrating Project Delivery: An Outcome Driven Framework for Achieving Highly Valuable Projects	Lean and Integrated Project Deliver are typically presented in terms of particular interventions or innovations. Alternatively, case histories are used to show how teams have achieve success using innovative organizational structures, processes and systems. While these presentations have value, they do not offer a functional framework to integrate the many aspects of Lean and IPD into a singular whole. Prof. Martin Fischer, Dean Read, Dr. Atul Khanzode and I have distilled our combined experience, the experience of other accomplished Lean practitioners, and current organizational behavior research into a principled and unified system for delivering high performance projects. The Simple Framework, shown below, is at the core of Integrating Project Delivery, a comprehensive text published this March by Wiley. Integrating Project Delivery begins with the outcomes we want to achieve and then, through the Simple Framework describes the requirements for achieving high performance projects, how to integrate these requirements, support them with a collaborative culture and tie the system together with an integrated agreement that is built on self-enforcing, relational principles.	Howard Ashcraft, Hanson Bridgett LLP; Dean Reed, DPR Construction	**The Business Case for Lean**	Intermediate/Advanced	THE2	300	Platinum 7-10	No	All
Thu. 3:10 PM	**40 mins**	General Session - Individual		Lean and Prefabrication - A Process Paradigm Shift	Implementing Lean process and tools have been a journey for most of the early adapters in the industry. The process to enable and optimize prefabrication on Lean projects challenges some traditional lean tools and enhances others. Our presentation outlines the challenges and best practices to implementing prefabrication and how they align, differ and enhance current lean process, thinking, roles, and practices.	Amy Marks, Xsite Modular	**Technology & New Techniques in Lean**	Intermediate	THE3	300	Salon AB	No	All
Thu. 3:10 PM	**40 mins**	General Session - Individual		Why Projects Excel? Great design enabled by Lean	Building on the success of the 2016 LCI sponsored owner study focused on why projects excel and the owner business case for lean construction LCI has sponsored a follow-on study focused on design professionals. Similar methodology of comparing best vs typical projects as well as evaluation against LCI framework will be conducted along with metrics geared to design firms to establish a benchmark of performance as well as identify impact of Lean methods. This presentation will be filmed.	Stan Chiu, HGA; Bevan Mace, Balfour Beatty; Michael Murray, The Beck Group; Andrea Sponsel, HKS	**The Business Case for Lean**	Fundamental	THE4	300	Salon E	No	All
Thu. 4:00 PM	**15 mins**	General Session		2018 LCI Congress Preview		Greg Zinberg, Clark Construction, and Kevin Labrecque, Limbach Facility Services, LLC	None	None	T5PS	TBD	Marquis - Plenary Room	No	All
Thu. 4:15 PM	**45 mins**	General Session		Closing Keynote - Karen Martin	**Clarity First** Karen Martin is a leading authority on Lean management and business performance improvement. She's the Shingo Award-winning author of The Outstanding Organization, in which she addresses how companies can improve their performance by reducing the organizational chaos they create for themselves. Her pragmatic approach to business excellence focuses on developing fundamental organizational behaviors that open the door to sustainable growth, greater profit, and a deeply engaged workforce.	Karen Martin, Leading Authority on Lean Management & Business Performance Expert	None	None	T6PS	TBD	Marquis - Plenary Room	No	All
Thu. 5:00 PM	**15 mins**	General Session		Closing Remarks			None	None			Marquis - Plenary Room	No	All
Thu. 5:15 PM	**6:15 PM**			Reception with Karen Martin **(INVITE ONLY)**	The top presenters will be determined by the session ratings in the 2017 LCI Congress app, recognized before Karen Martin takes center stage, and invited to the exclusive reception with our closing industry keynote. Clarity First Clarity: It's a simple concept and yet strikingly elusive. Lack of clarity collectively costs companies, educational institutions, government agencies, and non-governmental organizations billions of dollars per year, inserts unnecessary risk into every decision or action, drains organizations of the energy needed for productive effort, and causes customers to question whether the organization is capable of delivering value. Drawing on her latest book, Clarity First, Karen reveals how to use clarity to unleash potential, innovate at higher levels, and solve problems more effectively.		None	None			Platinum 3-4	No	Invite-Only
Training Day 1 - Monday, Oct. 16													
Mon. 6:45 AM	**45 mins**	**Meal**		**Breakfast**			Marquis	None		TBD	Marquis - Plenary Room	No	All
Mon. 8:00 AM	**8 hours**	Training		Introduction to Lean Project Delivery (1-day course)	This workshop is intended to give newcomers a broad awareness of the vocabulary, fundamental principles and basic practices of Lean Project Delivery. This can serve as a framework for learning how to apply lean thinking and methods to deliver significantly greater value on your projects and within your organization. This course offers up to 5 AIA credits.	David MacNeel and Dan Passick, On Point Lean	Lean Fundamentals	Fundamental	M1	50	Platinum 3	SOLD OUT	ALL

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Mon. 8:00 AM	**8 hours**	Training		Target Value Delivery (1-day course)	Objectives: -Learn what Target Value Delivery is -Learn how TVD process works through a hands-on simulation -Define the keys to success using TVD Target Value Delivery is a collaborative management practice and design process that is used throughout all stages of design and construction to ensure that projects are delivered within the allowable budget, meet the operational needs and values of the users and that projects promotes innovation. Participants will learn how to drive innovation into a project using constraints and understand the importance of continual cost estimating in giving power to the end users to add value. By participating in simulated activities, participants will also acquire an understanding of the parameters and methods for structuring Target Value Delivery within their own projects. This course offers up to 8 AIA credits.	Katherine Copeland, Southland Industries	Lean in Design	TBD	M2	51	Grand Ballroom JK	No	All
Mon. 8:00 AM	**8 hours**	Training		Choosing by Advantages Day 1: Fundamental CBA - Choosing one from two or more Alternatives (1-day course)	Choosing By Advantages Training for Teams taught by approved instructor John Koga uses lecture and hands-on activity to enable you to use the sound methods of the CBA Decision-making System individually or as a team. This course is split into 2 unique sessions to emphasize a major difference in decision types. Join us to improve your decision-making skills and receive a certificate of participation, AIA LU credit, Koga's spreadsheet files and a 3-volume set of CBA books by the originator Jim Suhr. This course offers up to 7.5 AIA credits.	John Koga and Juanita Frankfurth, The Boldt Company	Lean Improvement Tools	Intermediate/Advanced	M3	26	Grand Ballroom F	SOLD OUT	All
Mon. 8:00 AM	**8 hours**	Training		Creating the Culture of High-Performing Teams (1-day course)	Lesson Bullets – What a Participant Will Learn: • How to develop a culture (the behaviour that takes place when you're not there) that drives high engagement and high performance • How to use the boat metaphor to communicate to your team where they sit and what front of the boat behaviour looks like • How to engage every member of the team by identifying a team role in addition to their function by uncovering their intrinsic motivation factors This course is ideal for anyone involved in creating, leading or fixing project teams. Imagine your project team is a boat of ten people. In the average boat three people will be highly engaged and rowing, five will be watching and waiting for instructions and two will be drilling a hole in the back. This powerful workshop will show you how to turn an average team into high performing. It addresses how to engage the 50% in the middle of your boat and the 20% that are sinking your efforts. It takes you deeper than crafting a clear mission or values to defining the key specific behaviours for success. High performing teams don't simply happen, they happen by design. You will learn the distilled insight of over 10 years of research, working with more than 130 organizations and the strategies and techniques the best teams practiced. Each participant will receive a copy of Change your Space, Change your Culture. This course offers up to 7.5 AIA credits.	Rex Miller, Mindshift	Focus on People	Intermediate/Advanced	M4	50	Platinum 7	SOLD OUT	All
Mon. 8:00 AM	**8 hours**	Training		Value Stream Mapping (1-day course)	Though broadly used, most organizations fail to realize the full potential of Value Stream Mapping (VSM). Often delegated, performed over an extended period of time, limited just to production processes or used as a tactical process-design tool, the real power of VSM is only realized if it is utilized as a strategic, management-engagement methodology. In this interactive, hands-on workshop, and using a case study, you will broaden your understanding of how to harness the true power of VSM as an effective management practice and extend its application throughout your organization. Learn how VSM is intended to be used as much more than a just a mapping technique, and when properly managed, results in an aligned, engaged and knowledgeable leadership team. See how VSM can be used to build consensus and drive commitment via the development of a strategic-level transformation plan. Get insights on how to effectively use VSM for more complex processes. Learn through discussion and hands-on activities about the ins-and-outs of organizational transformation using VSM in office and service environments – and how to scope, plan and execute these activities. Learn how to: • Use VSM to build leadership consensus and engagement for developing a strategic-level transformation plan • Broaden VSM as an effective management practice throughout your organization • Properly scope, plan, socialize and execute effective VSM activities • Address unique issues in office-based value streams	Mike Osterling, Osterling Consulting	Lean Improvement Tools	TBD	M5	24	Grand Ballroom CD	No	All

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Mon. 8:00 AM	**8 hours**	Training		Lead with Respect (2-day course, LCI corporate members only)	Organizations reflect their leadership and when change needs to happen, it often needs to begin at the top. Through practice, we learn and gradually begin to master the 7 practices to become more effective leaders and create healthier high-performance organizations. This is a personal journey of growth, sometimes quite painful, which transforms individuals and companies. It is tough work and not for someone who believes that the change that needs to occur is 100% outside themselves! Come and learn about what Leading with Respect is about, add new skills, and drive new behaviors and results in your company. Building a great organization requires effective leadership. It turns out the leadership skills can be learned. A key element that is often misunderstood is what it means to lead with respect. This workshop explores why leading with respect is essential in a successful transformation, what respect looks like in practice, and how it impacts your people to drive lasting change for the better. Leading with respect involves awareness of our focus, how well we are connecting with people to created sustained high levels of performance. This is accomplished through the application of 7 core practices: • Challenge: a key to getting people to work together is to agree on the problem before disagreeing about solutions. Rather than setting fixed goal posts and objectives, “challenge” is about highlighting specific improvement dimensions in any job. The art and persistence of challenging brings an influx of energy and constructive tension to get teams focused on the right problems they need to solve. • Listen: challenges exist because of very real barriers preventing people doing what we want/need them to do. Listening means standing in their shoes and looking through their eyes until one understands the point of view the employee is expressing and the reality the obstacles they face. Listening also means actively going to the gemba, pointing out	Mike Orzen, Mike Orzen & Associates, Inc.	Focus on People	TBD	MT6	30	Grand Ballroom E	SOLD OUT	LCI corporate members-only
Mon. 8:00 AM	**8 hours**	Training		Leading for Sustainable Change - the use of the A3 Management Process (1-day course)	The fundamental purpose of any organization is to solve it's customers' problems. That, in turn, involves solving many more problems along the way. Successful enterprises understand the importance of developing problem solving as a core competency at all levels of the organization. But how does one really make this happen? The answer can be found in the A3. Often understood as a tool, a succinct story on a single piece of paper, the A3 is actually much more. In the class, Leading for Sustainable Change - the use of the A3 Management Process, participants will: 1) Develop a clear understanding of the true purpose of the A3 as a process to solve problems, but just as important, a process to develop people, align the organization and more effectively manage. 2) Practice writing their own A3. 3) Learn how to more effectively share their A3 with others. 4) Practice coaching others through the process of a problem-solve. 5) Learn the underlying thinking of a good problem-solve, regardless of the size or scope of the problem. To be successful in this class, pre-work is required of all participants: 1) Select a problem that you need to resolve, and is important to your organization's success. 2) Read the book, "Managing to Learn" by John Shook. Attendance to this one-day class is limited to 30 participants	Eric Ethington, Lean Shift	Lean Improvement Tools	TBD	M7	30	Platinum 9	No	All
Mon. 8:00 AM	**8 hours**	Training		Improvement Kata (1-day course)	A Kata is a pattern of behavior that serves as a basis for improvement and setting/attaining higher standards. In this workshop, teams of participants will practice the two essential Kata: (1) the 5-Question Coaching Routine and (2) the Rapid PDCA Cycles to build a scientific way of thinking, acting, and managing. In this workshop, participants will experience the core routines of Improvement Kata’s continuous improvement methodology through a highly interactive simulation.	Beth Carrington, Kata Matters; Jeff Uitenbroek, Toyota Kata and CI Coach	Lean Improvement Tools	Fundamental	M8	30	Grand Ballroom AB	No	All

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Mon. 8:00 AM	**8 hours**	Training		Villego Last Planner® (1-day course)	Objectives: Obtain an understanding of the LPS Develop an understanding of the skills and attitude necessary to truly cooperate successfully Identify the important ways the LPS structures the conversations necessary to work reliably The Villego® simulation enables participants to experience the contrast between traditional project management and the management of projects using the Last Planner® System of Production Control. Participants will assume the various roles typical commonly found on project sites, including that of trade foremen, superintendents, and project managers. As part of a team you will be required to build a complete building out of LEGO(R) blocks within a given budget and time constraint. The learning goals of this training include obtaining an understanding of the Last Planner® System, an understanding of the skills and attitude necessary to truly cooperate successfully, and the important ways the Last Planner® System structures the conversations necessary to work reliably. Participants will learn the importance of engaging all elements of the Last Planner® System as a key piece of their Lean implementation. This course offers up to 7.5 AIA credits.	Klaus Lemke and Susan Pratt Reinhardt, Lean Project Consulting	Lean Fundamentals	Intermediate/Advanced	M9	36	Platinum 8	No	All
Mon. 8:00 AM	**8 hours**	Training		Shingo - Discover Excellence (2-day course)	Objectives: -Learn and understand the Shingo Model™ -Explore how the Guiding Principles inform ideal behaviors that ultimately lead to sustainable results -Apply your learning with a call to action A foundational, two-day workshop that introduces The Shingo Model™, the Guiding Principles and the Three Insights to Enterprise Excellence™. With real-time discussions and on-site learning at a host organization, this program is a highly interactive experience. It is designed to make your learning meaningful and immediately applicable as you learn how to release the latent potential in your organization and achieve enterprise excellence. This course offers up to 15 AIA credits. (total - 7.5 each day)	Shana Padgett and José Bustillo, Value Capture LLC	Executive Education	Intermediate/Advanced	MT10	27	Platinum 4	No	All
Mon. 8:00 AM	**8 hours**	Training		AGC Unit 5: Lean Supply Chains and Assembly (1-day course)	Unit 5: Lean Supply Chain and Assembly is a one-day, instructor-led course that explains the concept of lean supply chain and assembly. Following this course, you will be able to: Differentiate between traditional procurement practices and lean supply chain applications; Identify waste and value-adding activities within the supply chain and assembly; Evaluate the impact of using lean supply chain on waste elimination, continuous flow and site operations pull; Identify strategies needed at the project and company levels to support the lean supply chain; List examples of process improvements to the lean supply chain; Expand lean beyond the individual project; and Create a value stream map to diagnose and improve the supply chain.	Sean Graystone, House of the Temple	Path to Certification	Fundamental	M12	30	Platinum 10	No	All
Mon. 8:00 AM	**4 hours**	Training		AGC Unit 1: Variation in Production Systems (Half-day course)	• How inventory and work in progress relate • Define 3 different types of variation • Explain the concept of throughput • Distinguish the concepts of throughput and work in progress • Describe the role of variation in production operations • List sources of variation in construction settings • Explain/contrast variation mitigation techniques AGC Unit 1: Variation in Production Systems is an introductory course in the Lean Construction Education Program. This half-day, instructor-led course teaches the concept of variation.	David Long and Paz Arroyo, Lean Project Consulting	Path to Certification	Fundamental	M11	30	Platinum 2	No	All
Mon. 8:00 AM	**4 hours**	Training		Last Planner® System in Design (Half-day course)	The Theoretical and Practical Learning Objectives include: • Why teams are more effective by collaboratively planning • The principles supporting Last Planner® System • Last Planner® System beyond just the Pull-planning session • How the principles are adapted for design phase vs. construction • Real team examples and experiences will be shared During this session, participants will learn why it is important to collaboratively plan during design phases and how Last Planner® System is an effective tool to support improved delivery for their projects. This use of Last Planner® System is adapted to the specifics of design, which is about advancing the flow of information. Last Planner® System has been used by teams during design to stabilize their delivery process by keeping all team members' needs being met reliably. The session will include a learning simulation to support the concepts. This course offers up to 4 AIA credits.	Christian Pikel, The Realignment Group	Lean in Design	Fundamental	M13	50	Grand Ballroom GH	No	All
Mon. 12:00 PM	**1 hour**	**Meal**		**Lunch**							Marquis North		

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Mon. 1:00 PM	**4 hours**	Training		Lean in Design-Build (Half-day course)	Lean is increasingly being used in Design-Build project delivery and naturally supports and builds on the collaborative environment necessary for success in design-build. Come learn how Lean naturally fits into design-build delivery and how you can integrate Lean into your design-build projects. Many public owners are now moving to a progressive design-build best value selection without requiring a firm contract price at award. Learn why and how are they doing this? The concepts of Big Room, Last Planner® System and Target Value Design are all integral to building successful teams that in turn deliver successful projects. Target value design is a key component in the growing application of Progressive Design Build to enhance the value proposition for owners. Learn how Last Planner®System can assist in design management as well as construction, commissioning, and turnover. This course offers up to 4 AIA credits. Learning Objectives: - Understand fundamental concepts of Lean design and construction including identification of waste, definition of value and importance of reliable and predictable flow on project outcomes - Learn how Lean is not only for IPD projects, but is particularly well-suited to use in Design-Build which accounts for 40% of non-residential projects - Understand the fundamentals behind Design-Build done right as recommended by DBIA - Learn how Lean reinforces Design-Build done right through an understanding of which Lean practices and tools align well with the objectives of Design-Build done right	David Umstot, Umstot Project and Facililties Solutions	Lean in Design	TBD	M14	50	Grand Ballroom GH	No	All
Mon. 1:00 PM	**4 hours**	Training		AGC Unit 2: Pull in Production (Half-day course)	Objectives: •Define batch & queue processes •Explain Little's Law •Identify limitations of pull systems in construction AGC Unit 2: Pull in Production is a half-day, instructor-led course that explains the concept of pull as a means to reliable production workflow. Following this course, you will be able to: • Compare batch-and-queue and continuous-flow production systems • Distinguish push systems from pull systems • Describe the impact of pull on production systems • Explain pull strategies in construction operations	David Long and Paz Arroyo, Lean Project Consulting	Path to Certification	Fundamental	M15	30	Platinum 2	No	All
Mon. 1:00 PM	**4 hours**	Training		AGC Unit 6: Lean Design and Pre-Construction (Half-day course)	Unit 6: Lean Design and Pre-construction is a half-day, instructor-led course that explains the concepts of value-based management, lean in the design process and relational contracting. Following this course, you will be able to: Distinguish between the varying definitions for design. Define value and commonly used methods to maximize it. Discuss waste and commonly used methods to minimize it. Differentiate between traditional project methods and lean design. Explain the various lean tools used in design and how to deploy them.	Bruce Cousins, SWORD Integrated Building Solutions	Path to Certification	Fundamental	M16	30	Platinum 1	No	All
Training Day 2 - Tuesday, Oct. 17													
Tue. 6:45 AM	**45 mins**	**Meal**		**Breakfast**			Marquis	None		TBD	Marquis - Plenary Room	No	All
Tue. 8:00 AM	**2 hours**	Research Work Session		Validation, What is it and why is it so powerful?	At some point in any project, the owner makes a "go/no-go" decision, often called "validation." The process of validation can vary widely, for example it might be: · formally defined as validation with clear processes and outcomes that include owner and core project team members. · informal and including only internal parties within the owner group. · Driven by owners' historical data, market information entered into algorithms that determine ROI Is there one type of validation that leads to better overall outcomes? More reliable budget or schedule? Better for managing first costs or operational costs? What are critical success factors? To answer these questions, we believe we first need to ask: Is there one type of validation that creates a better platform for Lean processes and integrated practices? Please come to this session to hear about LCI's research efforts around validation and share your experiences about using Lean and integrated practices on projects that had effective validation and those that did not.	Renee Cheng, University of Minnesota; David Grau, Arizona State University; James O Connor, University of Texas; Iris Tommelein, University of California, Berkeley	Orange County 3	None		25	Orange County 3	**SOLD OUT**	All

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Tue. 8:00 AM	**8 hours**	Training		Introduction to Lean Project Delivery (1-day course)	This workshop is intended to give newcomers a broad awareness of the vocabulary, fundamental principles and basic practices of Lean Project Delivery. This can serve as a framework for learning how to apply lean thinking and methods to deliver significantly greater value on your projects and within your organization. This course offers up to 5 AIA credits.	David MacNeel and Dan Passick, On Point Lean	Lean Fundamentals	Fundamental	T1	55	Platinum 3	SOLD OUT	All
Tue. 8:00 AM	**8 hours**	Training		Target Value Delivery (1-day course)	Objectives: -Learn what Target Value Delivery is -Learn how TVD process works through a hands-on simulation -Define the keys to success using TVD Target Value Delivery is a collaborative management practice and design process that is used throughout all stages of design and construction to ensure that projects are delivered within the allowable budget, meet the operational needs and values of the users and that projects promotes innovation. Participants will learn how to drive innovation into a project using constraints and understand the importance of continual cost estimating in giving power to the end users to add value. By participating in simulated activities, participants will also acquire an understanding of the parameters and methods for structuring Target Value Delivery within their own projects. This course offers up to 8 AIA credits.	Christian Pikel, The Realignment Group	Lean in Design	TBD	T2	51	Grand Ballroom JK	SOLD OUT	All
Tue. 8:00 AM	**8 hours**	Training		Choosing By Advantages Day 2 - Priority and Resource Allocation Decisions (1-day course)	Choosing By Advantages Training for Teams taught by approved instructor John Koga uses lecture and hands-on activity to enable you to use the sound methods of the CBA Decision-making System individually or as a team. This course is split into 2 unique sessions to emphasize a major difference in decision types. Join us to improve your decision-making skills and receive a certificate of participation, AIA LU credit, Koga's spreadsheet files and a 3-volume set of CBA books by the originator Jim Suhr. Day 2 CBA - Priority and Resource Allocation Decisions - Stay for the 2nd day to build your CBA skills. Participation in Day 1 or Instructor Approval of skill (bring work sample) is a required prerequisite for Day 2. In this session participants will: 1. Learn about using different sound methods for different decision contexts 2. Practice sound methods for prioritizing the things or plans in a set and allocating limited resources. 3. Learn to calculate and apply life cycle cost information. 4. Learn to integrate CBA with lean's A3 thinking. 5. Review of the nine CBA Principles and receive supplemental CBA information. This course offers up to 7.5 AIA credits.	John Koga and Juanita Frankfurth, The Boldt Company	Lean Improvement Tools	Intermediate/Advanced	T3	26	Grand Ballroom F	SOLD OUT	All
Tue. 8:00 AM	**8 hours**	Training		Kaizen: Culture of Continuous Improvement (1-day course)	The Kaizen Teian or Kaizen methodology promotes the sustainable continuous improvement as a daily way of life for every member within the organization. It supports the flow, implementation and recognition of improvement proposals made by all collaborators. Kaizen is the original concept that has been used by Toyota until today and that has become the culture in all Toyota sites in Japan and overseas. It provides a structure to channel the opportunities for improvement detected by any employee and convert them into realized changes that have a positive impact in the way people perform and perceive their work. Kaizen requires a formalized structure within the Organization, where collaborator's proposals are evaluated, implemented, reviewed and recognized according to their alignment to the company's declared objectives for continuous improvement. The recognition system also helps motivate collaborators to participate, either individually or through team work, in the proposal and implementation of their improvement ideas. Learning Objectives: At the end of this workshop, you will be able to: •Understand the fundamentals of Kaizen and its importance as a central aspect of a lean system •Document Kaizen improvement	Sammy O'Bara and Bruno Eiti Wakamoto, Honsha	Strategy	TBD	T4	50	Platinum 9	SOLD OUT	All

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Tue. 8:00 AM	**8 hours**	Training		Value Stream Mapping (1-day course)	Though broadly used, most organizations fail to realize the full potential of Value Stream Mapping (VSM). Often delegated, performed over an extended period of time, limited just to production processes or used as a tactical process-design tool, the real power of VSM is only realized if it is utilized as a strategic, management-engagement methodology. In this interactive, hands-on workshop, and using a case study, you will broaden your understanding of how to harness the true power of VSM as an effective management practice and extend its application throughout your organization. Learn how VSM is intended to be used as much more than a just a mapping technique, and when properly managed, results in an aligned, engaged and knowledgeable leadership team. See how VSM can be used to build consensus and drive commitment via the development of a strategic-level transformation plan. Get insights on how to effectively use VSM for more complex processes. Learn through discussion and hands-on activities about the ins-and-outs of organizational transformation using VSM in office and service environments – and how to scope, plan and execute these activities. Learn how to: • Use VSM to build leadership consensus and engagement for developing a strategic-level transformation plan • Broaden VSM as an effective management practice throughout your organization • Properly scope, plan, socialize and execute effective VSM activities • Address unique issues in office-based value streams	Mike Osterling, Osterling Consulting	Lean Improvement Tools	TBD	T5	24	Grand Ballroom CD	SOLD OUT	All
Tue. 8:00 AM	**8 hours**	Training		Shingo - Discover Excellence (2-day course)	Objectives: -Learn and understand the Shingo Model™ -Explore how the Guiding Principles inform ideal behaviors that ultimately lead to sustainable results -Apply your learning with a call to action A foundational, two-day workshop that introduces The Shingo Model™, the Guiding Principles and the Three Insights to Enterprise Excellence™. With real-time discussions and on-site learning at a host organization, this program is a highly interactive experience. It is designed to make your learning meaningful and immediately applicable as you learn how to release the latent potential in your organization and achieve enterprise excellence. This course offers up to 15 AIA credits. (total - 7.5 each day)	Shana Padgett and José Bustillo, Value Capture LLC	Executive Education	Intermediate/Advanced	MT10	27	offsite	No	All
Tue. 8:00 AM	**8 hours**	Training		Lead with Respect (2-day course, LCI corporate members only)	Organizations reflect their leadership and when change needs to happen, it often needs to begin at the top. Through practice, we learn and gradually begin to master the 7 practices to become more effective leaders and create healthier high-performance organizations. This is a personal journey of growth, sometimes quite painful, which transforms individuals and companies. It is tough work and not for someone who believes that the change that needs to occur is 100% outside themselves! Come and learn about what Leading with Respect is about, add new skills, and drive new behaviors and results in your company. Building a great organization requires effective leadership. It turns out the leadership skills can be learned. A key element that is often misunderstood is what it means to lead with respect. This workshop explores why leading with respect is essential in a successful transformation, what respect looks like in practice, and how it impacts your people to drive lasting change for the better. Leading with respect involves awareness of our focus, how well we are connecting with people to created sustained high levels of performance. This is accomplished through the application of 7 core practices: • Challenge: a key to getting people to work together is to agree on the problem before disagreeing about solutions. Rather than setting fixed goal posts and objectives, "challenge" is about highlighting specific improvement dimensions in any job. The art and persistence of challenging brings an influx of energy and constructive tension to get teams focused on the right problems they need to solve. • Listen: challenges exist because of very real barriers preventing people doing what we want/need them to do. Listening means standing in their shoes and looking through their eyes until one understands the point of view the employee is expressing and the reality the obstacles they face. Listening also means actively going to the gemba, pointing out	Mike Orzen, Mike Orzen & Associates, Inc.	Focus on People	TBD	MT6	30	Grand Ballroom E	SOLD OUT	LCI corporate members-only
Tue. 8:00 AM	**4 hours**	Training		Introduction to Last Planner® System (Half-day course)	Objectives: •5 levels of planning •3 key analysis (constraint, percent plan complete, variance) •Proven technique for executing LPS The training will provide a thorough explanation of the different aspects of the Last Planner® System. The class will utilize simulations to show how the individual pieces of the LPS integrate with each other, and real-life examples will be provided on the use of the LPS. Attendees will leave this training with enough knowledge and hands-on experience to actively participate in Last Planner® on a project or within an organization. This course offers up to 4 AIA credits.	Rich Seiler, Unified Works	Lean Fundamentals	Fundamental	T6	50	Grand Ballroom GH	SOLD OUT	All

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Tue. 8:00 AM	**4 hours**	Training		AGC Unit 3: Lean Workstructuring (Half-day course)	Following this course, you will be able to: • Apply the methods and tools utilized in pull planning • Describe the concept of Lean Workstructuring • Outline the desired outcomes of Lean Workstructuring • Describe the characteristics and application of the Last Planner® System AGC Unit 3: Lean Workstructuring is the first of two units that introduces the Last Planner® System (LPS). This system was developed by the Lean Construction Institute (LCI) to plan projects in a way that produces predictable workflow and rapid learning. This half-day, instructor-led course describes the process of Lean Workstructuring.	Julie Davis, DPR Construction	Path to Certification	Fundamental	T7	30	Platinum 1	SOLD OUT	All
Tue. 8:00 AM	**7 hours**	Training		AGC Unit 7: Problem Solving Principles and Tools (Half-day course)	Unit 7: Problem-solving Principles and Tools is a seven hour, instructor-led course that describes the Lean Problem Solving Process and illustrates how to use tools to solve problems in a lean manner. Following this course, you will be able to: Define the difference between traditional and lean problem solving. Describe how to create a team environment to solve problems. Explain how to create trust to avoid problems. Describe Observation Walks. Identify root causes of problems.	Heather Ormonde, Lean Six Sigma Consultant	Path to Certification	Fundamental	T8	35	Platinum 2	SOLD OUT	All
Tue. 8:00 AM	**4 hours**	Training		BIM+Integration (Half-day course)	Numerous owners are requiring teams to maximize BIM capabilities throughout the project lifecycle by utilizing Lean tools and methods for project development and management. The development of good information is enhanced through good team behavior. This class will demonstrate how Lean tools, principles, and methods are shaping BIM use in design and during construction. Issues in design include the non-linear nature of design and how a Kanban method helps focus on the decision process, roadblocks are mitigated, and productivity is refined. Changing the project kick-off to a conditions of satisfaction meeting where the BIM team can translate CoS to BIM Uses and align project value to decision support. Examples come from large owner BIM Guidelines, and project case studies.	Dianne Davis, Johnson, Mirmiran & Thompson; Bruce Cousins, SWORD Integrated Building Solutions; Kurt Dettman, Strategic Enterprise Technology, Inc.	Lean Improvement Tools	Various	T9	50	Grand Ballroom AB	No	All
Tue. 8:00 AM	**4 hours**	Training		Mindset of an Effective Big Room (half-day course)	Learning Objectives include: • Working definition of Big Room • Why teams work in a Big Room setting • What teams look to achieve by using a Big Room • The types of activities take place • How to keep the Big Room effective • The importance of trust and transparency • Sound Facilitation methods for organization During this session, participants will learn what is meant by 'Big Room' and how it supports Lean as an Operating System. The session will focus on understanding Big Room as a concept, how teams have used Big Rooms to support improved collaboration for delivery of their projects. The session will include a learning simulation to support the concepts. This course offers up to 4 AIA credits.	Dan Fauchier and Andy Fulton, The ReAlignment Group of California	Focus on People	Various	T10	50	Platinum 7-8	SOLD OUT	All
Tue. 10:00 AM	**2 hours**	Research Work Session		Exploring Lean Construction Adoption Strategies by Project Teams	Project teams new to embracing Lean Construction need to consider an adoption strategy and develop implementation plans with clear performance evaluation and accountability measures to ensure they realize the benefits and success Lean thinking offers. An LCI research team has been studying the approach that expert Lean practitioners use to strategize their Lean implementation at a project level. The team will share the common strategies used by these experts, and facilitate a discussion regarding successful approaches toward planning Lean implementation, including a panel discussion with leading implementers and researchers. The session will conclude with ideas for creating a preliminary adoption strategy procedure to enable Lean implementation planning, along with ideas for next steps for LCI to create a valuable adoption strategy model for team members.	Moderator - John Messner, Pennsylvania State University Tariq Abdelhamid, Michigan State University Clarence Waters, University of Nebraska Eric Ahlstrom, Amgen Dean Reed, DPR Construction	Orange County 3	Various		25	Orange County 3	No	Registered attendees only
Tue. 12:00 PM	**1 hour**	**Meal**		**Lunch**									

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Tue. 1:00 PM	**4 hours**	Training		Introduction to Last Planner® System (half-day course)	Objectives: •5 levels of planning •3 key analysis (constraint, percent plan complete, variance) •Proven technique for executing LPS The training will provide a thorough explanation of the different aspects of the Last Planner® System. The class will utilize simulations to show how the individual pieces of the LPS integrate with each other, and real-life examples will be provided on the use of the LPS. Attendees will leave this training with enough knowledge and hands-on experience to actively participate in Last Planner® on a project or within an organization. This course offers up to 4 AIA credits.	Rich Seiler, Unified Works	Lean Fundamentals	Fundamental	T11	50	Gand Ballroom GH	SOLD OUT	All
Tue. 1:00 PM	**4 hours**	Training		Getting Over the Hump: Getting Beyond Good Intentions to High Performance (Half-day course) OWNERS ONLY	A global top five contractor conducted two years of research examining the outcomes of every project. They divided them into those that ended well and those that ended badly. Their conclusion? 100% of projects that started poorly ended badly. Starting strong is the key to finishing strong. Most projects get stuck in the Forming - Storming - Re-Forming Loop. It can takes months to break through and reach the Performing - Learning - Improving Loop. The current system is designed to create distrust and to short change the front end efforts that lead to strong starts. Owners, contractors, architects and subs have decades of history and baggage that often sabotage efforts at trust-based project models. This workshop explores common traps that lead to self-sabotage and shares the foundations that have proven to create strong teams with strong starts. This workshop also provides tips and approaches to win over your biggest skeptics - your own organization. This workshop prepares you to lead change, succeed and live to tell about it. Each participant will receive a copy of, Nine Transforming Keys to Lowering Costs, Cutting Waste, and Driving Change in a Broken Industry Takeaways 1. How to gauge your team's trust baseline using the Trust Matrix tool. 2. Understanding the traditional project delivery drives waste, conflict and poor outcomes. 3. How to start smart and finish well by creating and using a team health dashboard. 4. How to win over skeptics when proposing a trust-based collaborative project approach. This course offers up to 3.5 AIA credits.	Rex Miller, Mindshift	Executive Education **Owner Interest**	TBD	T12	25	Grand Ballroom AB	SOLD OUT	Owners-only
Tue. 1:00 PM	**4 hours**	Training		Lean in the Design Practice (Half-day course)	Lean is increasingly being used in Design-Build project delivery and naturally supports and builds on the collaborative environment necessary for success in design-build. Come learn how Lean naturally fits into design-build delivery and how you can integrate Lean into your design-build projects. Many public owners are now moving to a progressive design-build best value selection without requiring a firm contract price at award. Learn why and how they are doing this. The concepts of Big Room, Last Planner® System and Target Value Design are all integral to building successful teams that in turn deliver successful projects. Target value design is a key component in the growing application of Progressive Design Build to enhance the value proposition for owners. Participants will also learn how the Last Planner® System can assist in design management as well as construction, commissioning, and turnover. This course offers up to 4 AIA credits.	Stan Chiu, HGA	Lean in Design	TBD	T13	50	Platinum 7-8	SOLD OUT	All
Tue. 1:00 PM	**4 hours**	Training		AGC Unit 4: The Last Planner® System (Half-day course)	Unit 4: The Last Planner® System is the second of two units introducing the Last Planner® System (LPS). This system was developed by the Lean Construction Institute (LCI) to plan projects in a way that produces predictable workflow and rapid learning. This half-day, facilitator-led course shows how to conduct make-ready and weekly work planning sessions. Following this course, you will be able to: Apply the Last Planner System on a project; Hold make-ready and weekly work planning sessions; and Calculate, track and analyze percent plan complete for a project	Brie Page, Balfour Beatty	Path to Certification	Fundamental	T14	30	Platinum 1	SOLD OUT	All
Tue. 5:00 PM	**1.5 hours**	Reception		Welcome "Sneak Peek" Reception	Network with attendees and exhibitors while you enjoy drinks and light hors d'oeuvres in the exhibit hall!						Exhibit Hall	No	All

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Gemba Day - Friday, Oct. 20													
Fri. 6:45 AM	**45 mins**	**Meal**		**Breakfast**			Marquis	None		TBD	Marquis - Plenary Room	No	All
Fri. 8:00 AM	**4 hours**	Gemba Walk		Gemba Walk: Southland Industries/Envise Shop Tou	Visit Southland and witness our approach to customer value through our independent, but closely connected businesses. See how Southland integrates Lean principles into our design build process, prefabrication shop, and controls and technology to leverage the lean advantage. * Bus transportation from the hotel is provided and REQUIRED PPE Requirements: Closed toes shoes. All other personal protective equipment provided by host.		None	None	Gemba3	40	Garden Grove, CA	SOLD OUT	All
Fri. 8:00 AM	**4 hours**	Gemba Walk		Gemba Walk: KHS&S Prefabrication Shop Part II	• Can we break through the next barriers of prefabrication with framing and drywall to provide greater value? How can framing and drywall (F&D) provide additional value through lean design for production, and lean processes and tools? • Help the AEC community understand the value of framing and drywall prefabrication. • Tell us how to provide you (more) value through framing and drywall prefabrication. • Educate the AEC community of the capabilities and barriers… * Bus transportation from the hotel is provided and REQUIRED PPE Requirements: Closed toes shoes. All other personal protective equipment provided by host.		None	None	Gemba4	40	Riverside, CA	SOLD OUT	All
Fri. 8:00 AM	**4 hours**	Gemba Walk		Gemba Walk: Toyota Motor North America	The Toyota plant in San Pedro is a key step in the mass customization process and very representative of the Toyota Production System. On this Gemba walk we will have an orientation to the process and an opportunity to see the Big Room, dashboards, the production line, and other quality and continuous improvement techniques. * Bus transportation from the hotel is provided and REQUIRED PPE Requirements: Closed toes shoes. All other personal protective equipment provided by host.		None	None	Gemba1	40	Long Beach, CA	SOLD OUT	All
Fri. 8:00 AM	**4 hours**	Gemba Walk		Gemba Walk: LAX Midfield Satellite Concourse Nort	Work along with the team of over 350 office and field staff as they use lean thinking to deal with the challenges of designing and building the $1.3 Billion Midfield Satellite Concourse at Los Angeles International Airport. The steel is going up on the 800,000sf concourse. Dual 1000ft Passenger and Utility tunnels are cutting across existing taxiways. Construction of the new baggage facility is started. In this huge undertaking, how do you develop a lean culture? What lean tools were used in design? Observe "Big Room" successes and failures. See how the Last Planner System is being used by five different construction teams. Learn the challenges of "challenging the process" with government agencies. With two years remaining, what insights can you share with the team to help them succeed?		None	None	Gemba5	40	Los Angeles, CA	SOLD OUT	All