Heidi: Hello everyone. We are going to get started. Welcome everybody to the Lean for Dummies Washington State Government book review. I am one of the facilitators for the Government office. I'm glad you have joined us today. Let's get into the material. Each week, we will review one chapter of the book, Lean for Dummies. Our current schedule reviews all 20 chapters by May 29. We are fortunate to have a special guest for the private sector partnership program. Today's special guest is Brett Cooper. I am sure you will benefit from the expertise he can share today. You can check out his biography on the website. As a reminder to everyone, we record all of these sessions. The recording is on the Lean for Dummies book review page. You can go to that anytime and click on the recording to hear it and there's also transcript available for those of you who would prefer to read it. Anytime you miss a session or want to review material, listen to the recorded session or review the presentation on your own. Remember, the purpose of the book review is to help understand Lean so you are actively participating in your agency. Here are tips about how to be deeply engaged during the session. Ask questions, and take the time to explain to someone else what you are learning. Everyone is on mute during the session to reduce background noise. If you have a question, please submit it using the chat feature. You will see a drop down menu above the place where you type the question, be sure you have the option, everyone, selected so we can all see your question. If you haven't already answered the poll question, they should be open now, type in the name of the city where you are right now. And the number of people at your location. We have participants from all over the state. It's exciting to see where folks are coming from. If you want to review any of the other [inaudible], look at the presentation which is available anytime. Let me move now to the chapter we are today, which is Chapter 11. Flow and pull tools. This is the table of contents. This chapter covers tools related to flow in preventing blockages as well as pull tools. I will turn it to our partner today, Brett Cooper.

Brett: Hello everyone. As Heidi mentioned, we have been working diligently with the state to promote the Lean culture journey and it has been a great experience thus far and we are excited to be part of it. If you want more information about us, you can find out on our website. There is information about upcoming events we are trying to put together for the state on the. Let's jump into this. Chapter 11 about flow and pulled. I understand what most of you like to get out of these his there, review the slides themselves, for folks like me to share stories and give examples so that's what I will do. We will keep an eye on the questions and if anything comes up, we will try to address that. Getting into it, the first concept in this chapter is 5S and ultimately the tool for workplace renovation. [inaudible] more safe and one of the next things about it is when problems arise, it's easier to identify that when there is an organized workplace. When we work with organizations on 5S, most people see it is fairly obvious in a physical setting. Last week, I call it spring cleaning for my garage, pretty good at the first three S's, but not quite there for the last two. I have to do it every year over and over. If you think about this in more of an administrative point of view and those of us in desk jobs, it still applies. I was speaking with folks in the Department of Commerce this morning and they warned me, don't tell us to start 5S at our desk and work areas because we've heard that. So I won't tell you to do that but if you get a chance, you should. What you might not have thought about is the electronic world. Think about your computers. Your personal computers, desktop and shared drives. Many organizations put projects together to clean up shared drives. Think about how long it takes to find a file sometimes. Or how many people you have to ask to find a file. Much of that can be overcome with the 5S in the electronic world. Hopefully that is a helpful tip. Flow, the idea of flow think about it this way; picture a boat going down a river. The boat is the customer or the thing you are working on and the river is the process. The idea of flow is that the boat should go downstream easily without slowing down or hitting rocks. The question here and what the book puts out is some ideas of how to maximize the flow of the process. How do we let the customer or thing being produced flow downstream easily without getting stuck in our process. The book highlights several techniques. One of the techniques we use quite a bit is to arrange the workstation for the modules to facilitate flow. A lot of organizations sell designs, or Lean for Dummies calls it arranging work modules. To give a picture of this, think about Chipotle. They don't have a bunch of burritos ready, they do it just in time. As you stand as a customer and look across, there are usually a couple of people serving you and the process is designed in modules to build your order. The people behind the counter go down the line and you get the order and nobody really moves. They have all the tools they need and the ingredients. They put it in and push it down to the next person and they keep passing it down. Think about your own work environments and think about where your customer or the thing you are producing, where does it get bogged down. Look for places where customers are waiting or things [inaudible] and try to arrange your area so you have tools you need and that the customer can come in and get what they need and move on out. There are, the slide highlights a bunch of different ideas for preventing flow blockages. As we got to the section, a couple of examples came up. One example on the quality of the source has to do with a fictitious name filing. We are still working with the clerk County down in Los Angeles County and California. This county had a large number of defects in their fictitious business name applications. Over 50% of the applications had an error and about half the applications were rejected. The group did some analysis and it became apparent that the problem wasn't that the applicants were not doing what we asked them to do, it was that the form was very confusing. It was several pages long with lots of redundancy. Try to go out and changing customer behavior, instead they attacked the form and by changing the form they instilled quality at the source and when they launched the new form, errors dropped and the percentage of defects dropped to 5%. This idea of quality at the source, the nice thing is that rather than looking to the customer to tell them what they are doing wrong, let's look at what kind of variation and problems we are causing on our own and how we can change that. Another concept in the book is mistake proofing. This is elegant in its simplicity. If you look around and see all kinds of ways

this concept comes to life. Most of us work in buildings that have elevators. You can't get into an elevator, the door is not going to close on you. Sometimes the seatbelt does not buckle. In our workplaces, one of the ways we see this a lot is on online forms. In order to complete many forms, there are certain areas and fields that need to be coded he free to move on. That's a good way to make sure you are capturing information you need. An example I want to give on this point, is the concept of quick change or single minute exchange of [inaudible]. This is a topic and concept that most people in service oriented organizations say this is a manufacturing thing and does not apply to me. But it can. We have an example from our work in Los Angeles. This had to do with the birth and death certificate processing. They had a physical area where citizens came in and filled out paperwork and got their certificate processed and of course, the hours between lunchtime of 11:30 to 1:30 were the peak hours but that was also the time when cashiers needed to rotate for their lunches. We looked at the process and discovered each cashier was required to cash out their drawer before going to lunch. That required them to do the counting process and make sure everything was in there and cash back in at the end. This process took 35 minutes for each cashier to do, taking them off the lines for citizens and required a supervisor to check on them. There were 12 cashiers so it took considerable time to do this. This was at a time when customer demand was high. Looking at that, we took the concept of quick change and thought about, how can we to streamline the process and we found a way to take those drawers and put them into a cabinet under lock and key that nobody could get to and it enabled the cashiers to set their drawer into a locked and protected area. They came back from lunch, and it changed 35 minute changeover process down to less than 10 minutes. The nice thing was that cashiers were able to reallocate that time to serving citizens that were up the counter. I will pause here because it looks like there is a question.

Heidi: The question is, issues that result from understaffing relating to clients experience because of the limited staff. Can you speak to that?

Brett: One of the concepts coming up has to do with production leveling. Leveling workflows. In a nutshell, when you can't get additional resources to come in during peak hours, take a look at how the staffing model works right now and one easy thing is, are people taking breaks when the demand is high and can you adjust some of those things. Think about how can you move some of the non-time critical work to a different timeframe? If anybody has ever been a waiter or waitress in a restaurant, think about when do they do their cleanup? Every waiter or waitress has to do cleanup. They don't do it during peak hours they do it during slow hours. Take a look at the work items that need to take place and see what you can shift to times when the clients are there and waiting. That's one idea. There is also a question that says more about [inaudible] which is mistake proofing. Telling more about that, the idea they are on this mistake proofing is taking a look at the process or activities that need to occur and make it impossible or as difficult as possible to make any kind of mistake. I give examples of it. Look around and look in your office and see lots of different examples of that. I don't know what more we can say about it. If there is a more specific question, go ahead and ask and we'll see if we can address it. Production leveling. As I was just talking about this involves evenly distributing the work as best you can. The goal is to fill customer demand over a period of time. When work is not leveled, work areas fall behind at certain times of the day and at other times, people might spend a lot of time waiting around for the work to come. The idea is, how can we level out the workload as best we can so the customer is getting what they need when they need it. An example from our work with the Department of VA, the Medical Center's, we were working with the healthcare centers in looking at elected surgery process. The situation that was going on was Monday's had a real high backlog. As we did the root cause, we found out they were scheduling elective surgeries on Monday and they did it without regard or understanding that Monday's tend to be the highest, demand days because it inevitably, people came in from injuries over the weekend. So we revise the process for assigning the operating rooms because at the core there was too much trying to get pushed into Monday's. We redesign that process for assigning operating rooms and set a flat rule saying there is no elected surgery on Monday. These were non-emergency situations so they could wait till Tuesday or later in the week. So the VA Center pushed all those elective surgeries and two slower parts of the week and the result, several results. The elective surgery patients were much more satisfied because they were not waiting around on Monday's. People coming in for emergency processes, they also got served better and there was less waiting and it created a lot less hectic work environment for the employees internal to the VA. It was a win win all the way around. That is something that can be used to address the question that was asked a moment ago. About flow issues. Pull tools. Here are a number of tools that are used. These are effective ways to reduce cycle times, reduce inventory costs. This is a pull system which is the opposite of a push system that builds a product according to a forecast any organization trying to use or sell or distribute as many that are built. The pull system works on customer demand and production kicks in when the customer initiates that. Here are some tools. For example, I work with another healthcare Center, we were working in their pharmacy group and we looked at their pharmacy and what was going on, we looked at inventories and the amount of medicines they had and they were spending a lot of time going through the inventory and they had a lot of dollars tied up in their inventory costs. We found that many of the medicines had a safety stock and some of these stocks were over one year of inventory because things got real ordered and reordered because it felt like they were low running low on them. The real issue was some of the medicines that had up to a year of supply could be ordered in 48 hours. There were problems with space, money tied up with the medicines and also, in the fact that many of these things ran past the expiration date. What we did was help them build a Kanban program which is some kind of a trigger or indicator that it is time to either reorder or pull another supply. We put cards in each one of the medication trays and the idea was that as the pharmacist was pulling up the medicine out of the tray, until they hit the card there was no reason to worry about reordering. As soon as they got to the card, they dropped it into a box and the pharmacy area and at the end of each day they gathered the cards and reordered. This enabled them to drop their safety stocks by a high

percentage and it also gave them a lot of time back because before we made this process, the process for reorder in took about 75 minutes every day because they were going through and looking at all the various trays and seeing how much they needed. Now it dropped down to 20 minutes a day because they just looked at the box of cards. That was something they found very successful. That's an example of a pull system. Is there another question?

Heidi: This is related to the production leveling, how do you translate level production in an office environment where we process invoices, time sheets, etc.?

Brett: How we can put this idea to work there is one of the things with production leveling with is connected with flow and the concept of batches. The concept of batches has to do with when we save up all of our work and get it all done at one time. One thing we can do as far as invoices, the information comes to us and getting those done in a single piece flow kind of way and getting them in and out in a real-time format is one technique we have found that helps with leveling that production. The other thing is, with things like time sheets and payroll, you know there's going to be certain times in the month or in the week that those are going to be big parts of the job. So as we talked about before, look and see what some of the other work items you can take off of the plate during those times when we know we will be inundated with these regular, cyclical work activities we need to do and put those two different time of day were different time of week. Going back to the concept of when does the waitress do their cleanup.

Heidi: Thank you. We have a couple more minutes here. If anybody has another question, take the time now to submit it. Questions on flow, pull, or in general while we have Brett here and have the opportunity to ask questions. It looks like we have one more. This says, [inaudible] relate to people in eliminating positions, is that type of work part of the Lean process?

Brett: When we talk about Lean, we try to help people understand Lean is not an acronym for less employees are needed. When we go through 5S and as we clean up things, if we recognize we have more staff or resources than we need, the short answer is, yes there is an opportunity to identify where you have to much. And if you have too much on the people side of things, that is something you need to address. The idea should not be to use this for cutting heads but rather to streamline the process so the heads that are there working in the process can get as much work done at a time.

Heidi: I think we talked about this a lot in state government, the idea that as we walk through the process of organizing things in the agency, this is state government and we are in budget cuts but the idea is you should not ever Lean yourself out of a job. If you are involved in a process improvement that results in savings, we should be able to reallocate positions and realign work in such a way that people are not discouraged from participating in Lean activities for fear of losing jobs. With the note in mind that it is state government and we may be cutting positions for some time with our budget magically returns.

Brett: We've done a lot of work in Oregon, and we won over union groups with understanding the argument that we are in a situation and environment where budgets are getting cut and the nice thing about using Lean to make thing a more streamlined is we can reduce costs in areas other than headcount and if budgets are going to be reduced they will be reduced but Lean can help you be more strategic and where those cuts come.

Heidi: Perfect. Thank you so much Brett. If anybody has last questions we have another minute. Brett, do you have any final words of advice or input for us?

Brett: I'm really impressed with how the state has been moving forward. I've been up here for the last couple days talking to different departments and the progress seems to be moving on and on and so much of the focus now seems to be moving toward how do we move beyond getting the projects done and moving into making this part of our culture and that is very exciting and that's what leads to [inaudible] decision on creating a culture that will last long beyond his administration. I am thrilled to be part of it. The entire team is very excited and we're going to keep working.

Heidi: We are excited and grateful to benefit from your experience. Thank you very much. We try hard to get you the link before the session, we will get it to you, so remember to take the quiz this week and you can always look at the answers on the accountability and performance website around the same spot that the quiz, recordings, and transcripts are. Thank you everybody. Thank you all for learning to use Lean to deliver value to Washingtonians. Have a great week.