

Vermont Department of Environmental Conservation Business Transformation Initiative Implementation Annual Report

The Vermont Department of Environmental Conservation's (DEC) Business Transformation Initiative (BTI), housed within the Administration and Innovation Division, is an effort to build a system of continuous improvement with the goal of better servicing the Vermont public through more efficient, timely and transparent processes. This initiative will utilize "Lean" improvement methods, modern information technology tools, and a new electronic records system.

Background

"Lean" refers to a collection of principles and methods that focus on the identification and elimination of non-value added activity (waste) in any process.¹ DEC's Commissioner Mears first learned of "Lean" from environmental Commissioners in Connecticut and New Hampshire, who raved about increased efficiencies as a result of Lean implementation. After a strategic planning effort that identified a business transformation initiative, utilizing Lean, as its highest strategic priority, and gaining support from the Vermont General Assembly, DEC launched our Lean efforts in July 2013. Our goal is to increase our level of service to the Vermont public, businesses and municipalities through improving our business processes.

To achieve that goal, we formed a BTI Committee, consisting of Department and Division leadership staff, hired a consultant (Leanovations), filled three new positions (Project Manager, Business Analyst, Systems Developer), and read up on Lean. Together, we created a train-the-trainer model for Lean implementation, an annual Lean event plan, and a list of potential Lean projects. We formed sub-workgroups to vet project ideas, based on certain criteria (supports DEC's strategic plan; benefits the public/external stakeholders; has widespread internal appeal), make project recommendations, assess feedback from Lean events, and assist with developing training materials. We also created a survey form where staff may submit Lean project ideas for consideration.

Lean Training & Preparation: December 2013-February 2014

Approximately 150 staff were introduced to and trained on Lean between December 2013 and February 2014. These opportunities were aimed at providing staff a basis for positive, effective Lean engagement.

- Manager Orientation: Managers were engaged in developing a list of potential Lean projects.
- BTI & Management Team Training: Individuals received Lean 101 training, drafted "team charters" for the top six potential project events, and sketched out a Lean deployment plan. A debrief followed, outlining needs for a successful first Lean week and long-term structural needs to vet future potential Lean projects.
- Lean Coordinators Selected, Trained: Eighteen staff were selected and trained as Lean Team Coordinators, a significant step in building internal capacity. Trainees learned about Lean process improvement techniques and facilitation skills through overviews and simulations. Coordinators were trained on Value Stream Mapping, a core, visual part of a Lean event.
- All-Staff Optional Lean Overview: Two three-hour 101 Lean Awareness Symposiums were held at the Pavilion Auditorium for DEC staff and other interested state government employees.

Lean Launch & Implementation: February 2014 – June 2014

Our goal is to hold at least nine Lean events, bi-annual trainer trainings, and one to two mini Lean events in calendar years 2014 & 2015. Each event includes approximately 15 participants, including trainers, and goes through a five-day agenda, which is challenging, yet rewarding for most. External stakeholders are engaged in the process, as are subject

matter experts from similar programs in state government or the private sector. The stakeholder engagement provides an opportunity for direct feedback from the users of the process.

Lean Event Agenda:

- Monday: Overview & Fact-Finding Day
- Tuesday: Discovery Day (Value Stream Mapping)
- Wednesday: Just Do It Day
- Thursday: Judgment Day
- Friday: Final Reporting & Celebration Day

Ongoing management of these projects includes: monitoring implementation measures and plans, monthly check-in meetings with Department leadership, monthly presentations to the Department Management Team, and written quarterly progress reports.

Ongoing Trainer Training for Lean Coordinators

Eighteen staff have been trained as Lean Coordinators to date, a significant step in building internal capacity. Another 30 Lean Coordinators will be trained in July. Fred Shamburg, of Leanovations, will host the training. Beyond the skills gained from these trainings, we aim to develop an ongoing training module that we can run internally and augment the training provided by our consultant. Other ongoing training opportunities include: shadowing our consultant during Lean events, and attending regional Lean Summits.

Lessons Learned & Ongoing Challenges

Our goal is to build upon our experience and solicit insight from our Lean Coordinators and participants following Lean Projects to improve our process.

Some of our lessons learned to date include:

- Experience pays off. The second Lean events went better than the first.
- Success of the Lean project depends most on the team makeup. Participant strengths, stakeholder niches, and subject matter experts should be considered, and reviewed collectively pre-Lean event. Start this process early. It can be difficult to convince external participants (stakeholders/subject matter experts) to commit the amount of time required.
- Heavily vet projects upfront, developing a strong charter and a clear problem statement.
- All levels of management within the selected program must support the Lean project.
- The Division Director or Sponsor of the Lean project must articulate his/her vision for the project, and provide strong leadership during the Lean week and during follow through.
- Ensure clear lines of frequent communication at all management levels related to the Lean project. There will be a need for quick, weighty decisions in the preparation and implementation of the Lean event.
- A co-facilitator can be critical support for the lead Lean Coordinator, and improve the participant experience.
- Have more supplies than you need. The event can come to a temporary standstill without them.

Some of the challenges we are working through:

- Determining what the best team makeup is, and providing that guidance to others.
- Assessing the level of benchmarking and fact-finding needed upfront to determine if a project idea is viable.
- Temporarily absorbing Lean Coordinators into existing accountability loops to ensure they get what they need before, during and directly after the Lean events.

- Sharing ownership of the Lean process with Division Directors to keep the program moving forward.
- Establishing an internal and external communication plan on the Lean process and results.
- Deciding which IT solutions to prioritize, given limited IT resources.
- Logistics around the events, and communication with external participants (too many points of contact).
- Lean project selection criteria continues to evolve.

^{i 1} James Womack, Daniel Jones, and Daniel Roos coined the term “lean” in their 1990 book *The Machine that Changed the World* to describe the manufacturing paradigm (often referred to as the Toyota Production System) developed by the Toyota Motor Company.