

DEC Business Transformation Initiative

Annual Report July 2016—June 2017

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 includes the deployment of a "Lean" process improvement methodology along with modern information technology tools.

Background

The term Lean, coined by Jim Womack in the 1990 book *The Machine that Changed the World*, describes a manufacturing paradigm established by Toyota. The mantra of Lean is to "develop the highest quality products, at the lowest cost, with the shortest lead time by systematically and continuously eliminating waste, while respecting people and the environment." This is accomplished by merging management systems, organizational culture, and continuous improvement tools. When in alignment, these three elements create an environment where employees are encouraged to identify and solve problems, which leads to more effective and efficient processes. Numerous organizations, both private and public, have found success using this model.

DEC, following other state agencies in the region, decided to adopt Lean as a process improvement methodology and management philosophy in July 2013. With support from the Vermont Legislature, DEC took a structured approach to its Lean implementation, dedicating both staff and resources to the effort. This decision was crucial in not only getting Lean quickly off the ground, but also in sustaining it for the long-term.

Seeing a need to formalize its Lean efforts more fully, DEC adopted a [3-Year Implementation Plan](#) in September of 2016 which laid out training and staff participation goals, processes for project identification, initiation and development, and communication strategies. This annual report provides an accounting of DEC efforts to deliver on the implementation plan.

Lean Defined

Developing the highest quality products or services, at the lowest cost, with the shortest lead time by systematically and continuously eliminating waste.

Staff Training and Participation

37 Staff Trained in Continuous Improvement Principles and Methodologies



74 Staff Involved in Process Improvement Activities

Training and participation is an important component of DEC's Lean Initiative and is an effective tool for increasing the knowledge and use of Lean throughout the Department. This year, 37 DEC staff participated in formal Lean training opportunities and 74 staff were involved in process improvement activities. A big change this year was the offering of "belt" trainings through the Center for Achievement in Public Service (CAPS). White Belt provides an introduction to the principles and tools of continuous improvement, Yellow Belt provides hands-on learning and application of Lean and Results Based Accountability techniques and thinking, and Green Belt helps staff develop the skills necessary to guide a group through an improvement project and act as a change agent within an organization.

23% of Staff Trained and 60% of Staff Involved in Improvement Activities Since 2013

Project Initiation and Implementation



Continuous improvement projects, which are intended to solve problems by identifying needed changes in policy or process, are the primary vehicle through which Lean thinking is employed throughout DEC. Using a Lean lens, we look for ways to improve customer satisfaction, create standardization and consistency, reduce waste, improve productivity, and free capacity for staff to conduct higher value work in service to the citizens of Vermont. Below is a listing of the projects either initiated or supported by the Business Transformation Initiative in state fiscal year 2017. These represent projects of various levels of complexity which were identified and developed and now in different stages of implementation.

6 New Mini-Lean Projects Initiated

- Ark and GCMS System Integration
- Onsite Wastewater Application Processing
- Stream Alteration Permitting
- Records Retention Schedules
- Wastewater Inspections
- Wetlands and Enforcement Collaboration

3 New Lean Projects Initiated

- Permit Expediting Procedure
- Permit to Construct a Public Water System
- Permit Process Tracking

7 New Non DEC Projects Supported

- Act 250 and Section 248 Response Management
- Child Abuse and Neglect Court Processing
- FPR Contracting
- Agricultural Development Grants and Contracts
- Limited Service Extension Process
- Seasonal Hiring
- Toxics Working Group

*49 Projects
Initiated or Supported Since 2013*

Results



Measuring the results of our Lean efforts is important for ensuring that the intended outcomes of changes to policy or process are realized and that investments in staff time or other resources to make the changes are worth the effort. Below is a sampling of results from seven projects which were completed this year.

7 Lean Projects Completed Resulting In:

- Expansion of AmeriCorps program to 24 members
- Return of \$3,139,497 in funding to the State Revolving Fund
- Decrease in time to develop grants and contracts
- Decrease in time to pay external partners for services
- Development of a system to track water quality projects
- Greater than 100% increase in electronic payments submitted
- Increase in Wetlands staff time spent on proactive site visits

Communications

Communication on Lean efforts is done through a variety of means. Two of the primary mechanisms used internally are referenced below.

Quarterly Project Reporting

Provides status updates on all major DEC Lean projects as well as milestones and tracking of key performance indicators.

Bi-monthly Newsletter (Gembagram)

Sent to all DEC staff covering topics such as program and project updates, upcoming training opportunities, staff kudos, tool highlights, and informative links.

*A public facing webpage can be found at
<http://bit.ly/2izHwtN>*

Statewide Support

Program to Improve Vermont Outcomes Together (PIVOT)



On his first day in office, Governor Scott issued an executive order establishing a Program to Improve Vermont Outcomes Together, otherwise known as PIVOT. PIVOT asks every agency and department to identify improvements across programs within the service systems they manage, as well as better coordinate efforts like Results-Based Accountability and Lean that equip staff across an organization to identify and improve the processes that they do to fulfill their work. Given the success of Lean at DEC, staff from BTI were asked to assist the State's Chief Performance Officer (CPO) in developing the specific programmatic elements of PIVOT and rolling it out across the state. It was quickly established that in order for PIVOT to be successful, three things were needed: a fairly robust inventory of the major service domains, programs and activities being employed by agencies and departments which would be used to provide baseline information about what Vermont state government is responsible for and how it meets those responsibilities; a mechanism for identifying high leverage projects which align with statewide goals, and a means of empowering staff to conduct continuous improvement activities on a day to day basis. Major progress has been made in all three of those areas with the completion of a comprehensive service domain, program and activity inventory, the development of 44 targeted action plans, and the training of 126 state employees.

1 Comprehensive Service Domain, Program, and Activity Inventory Completed

44 Targeted Actions Plans Developed and Currently in Implementation

126 State Employees Trained in Continuous Improvement Principles and Methodologies

Successes and Challenges



Right sizing Lean events based on need

Utilizing a diversity of tools and techniques

Using a structured approach to problem solving that works from end to means

Generating improvement ideas at the program level

Leveraging improvements across systems

Fully utilizing the network of Green Belts

Dividing limited resources across Department and Statewide efforts

Maintaining momentum and communications during leadership change

FY18 Work Plan

Build upon successes to date and expand utilization of principles and tools across the Department

Encourage and support everyday improvements at the operational level

Provide assistance to managers in their efforts to improve program performance

Identify and implement three to four Department-wide projects which carry high impact and leverage

Continue to build staff capacity through training and practical application

Bolster communication about Lean efforts internally and externally