

ALLIANCE and FCCMA
MAKING MAGIC: HOW BOLD CAN GOVERNMENT BE?
JUNE 1-3, 2011

CASE STUDY APPLICATION

Case Study Title: Efficient Government through Lean Six Sigma

Jurisdiction Name: Erie County

City/County Manager: Chris Collins

Project Leader – Primary Contact

Name: Al Hammonds

Title: Deputy County Executive

Phone Number: 716-636-2568 ext. 14

Email: ah28@buffalo.edu

US Mail Address, including zip code: 1576 Sweet Home Road, Amherst, NY 14228

Presenting Team Member

Name: Tim Leyh

Title: Executive Director, UB Center for Industrial Effectiveness

Phone Number: 716-636-2568 ext. 23

Email: tleyh@buffalo.edu

US Mail Address, including zip code: 1576 Sweet Home Road, Amherst, NY 14228

SYNOPSIS

In 2007, Chris Collins, a business owner with more than 30 years of private sector experience, was elected County Executive of Erie County (New York). His campaign platform was built on three R's: **Reform** county government, **Rebuild** the economy, and **Reduce** taxes. His pledge was to "turn around the failed enterprise of county government," challenging the status quo to make government operate more like a business.

Collins won with 64 percent of the vote. Lean Six Sigma - a proven quality methodology that increases efficiency, eliminates waste and cuts costs - would be the foundation for change in Western New York.

Collins refers to Lean Six Sigma as a "philosophy of success" and has relied on its applications many times in his companies. "I knew it was going to work. It's worked so many times for me in the past."

Implementing the Lean Six Sigma method has the potential to:

- Streamline processes and eliminate waste
- Reduce variability
- Minimize downtime
- Generate data to make informed decisions
- Create positive culture change
- Encourage and engage all employees in the problem-solving process
- Promote standardized work

To help achieve his goal of making county departments and agencies more effective and efficient, coupled with his commitment to gain long-term taxpayer savings and renewed prosperity, Collins hired a Lean Six Sigma director and solicited bids for professional training, consultation and assistance. With proper funding in place, Collins and his staff began tackling the job of streamlining processes, eliminating bottlenecks, and engaging personnel in the use of the fundamentals of Lean Six Sigma.

When Collins entered office, he was also faced with the challenge of working with the Erie County Fiscal Stability Authority (ECFSA) which had been created in 2005. ECFSA was overseeing the county's finances, requiring prior approval for expenditures of more than \$50,000.

Not quite a year and a half into Collins' term, ECFSA abandoned the "hard" board stance and moved to a "soft" role. They no longer needed to pre-approve all contracts, hires and any borrowing. The move came about because Collins provided a four-year plan demonstrating the actions he would take to ensure finances are balanced. While Lean Six Sigma and its data dependency were not the sole reason behind the change, they were a contributing component.

Innovation

Erie County chose to partner with the University at Buffalo Center for Industrial Effectiveness (the Center) - to serve as the prime agent to assist in implementing Lean Six Sigma. The endeavor has made Erie County the first large county in the United States to implement Lean Six Sigma.

Every aspect of county-wide government - where local control of operations is not always a luxury - is being permeated by the quality methodology. Erie County government employs approximately 6,000 people and has an annual budget of more than \$1 billion. Lean Six Sigma spans across 27 departments in varying degrees of penetration, from Social Services and Mental Health to Public Works and Central Police Services, engaging all levels of authority. The approach includes a steering committee, composed of a Director of Six Sigma and all 12 commissioners and department heads. There are also two union officers – a representative each from the Civil Service Employees Association (CSEA) and American Federation of State, County, and Municipal Employees (AFSCME) – as well as an Erie County legislator and one control board representative.

Monthly committee meetings focus on progress reports, analyzing successes, identifying improvement areas, and planning future steps. A separate external advisory committee of up to 12 members is composed of professionals from industry and academia who are immersed in the Lean Six Sigma practice.

The program's structure

Deployment began in spring 2008 with Executive Overview training, whereby 12 county commissioners received an overview of Six Sigma, Lean, and Kaizen techniques and the impact of using data to improve business.

Other trainings and consultations include:

Champion Training: County commissioners underwent an in-depth examination of data-driven applications and the DMAIC (Define/Measure/Analyze/Improve/Control) problem-solving approach. They learned of the importance of executive-level support in the success of any Lean Six Sigma program.

Lean Six Sigma 101: Equivalent to a Yellow Belt program, this training for 100 people across departments involved full-day instruction focused on Lean Six Sigma tools, including value stream mapping, DMAIC analysis, and Critical-to-Quality metrics. During a half-day workshop, attendees identified improvement projects with the potential to become Green Belt projects.

Green Belt Certification Program: Four waves of Green Belt training classes were rolled out starting in April 2008. Each wave contained nine county employees spanning every government division. The certification candidates received 72 hours of classroom training in Six Sigma's DMAIC methodology, completed an improvement project and received on-site consulting and

implementation support. After certification, these Green Belts continue to build upon initial projects as well as future improvement projects.

Bridge-to-Black Belt Program: Green Belts seeking Black Belt certification have done so via Bridge-to-Black Belt, a program to expand skills already learned and flesh out any training gaps. Each candidate completed an improvement project.

Black Belt Certification Program: A wave of Six Sigma Black Belts were also educated in the DMAIC methodology, but at a deeper level than the Green Belts. In addition to classroom training and a certification exam, each candidate completed an improvement project.

Aside from the above programs provided by the Center, a change management component was a part of the overall structure. Erie County is moving the government's culture toward one that supports high performance in order to sustain long-term performance excellence.

Impact

Lean Six Sigma has exceeded expectations and is being embraced by elected officials – including the county clerk and sheriff - who are not under the jurisdiction of Collins and his initiative.

Lean Six Sigma training and implementation helped achieve a \$13 million surplus for the county in 2008, when governments across New York were facing deficits. The Collins' administration also ended 2009 with a \$44 million surplus.

Since its inception, a significant Return on Investment has been realized. The initiative has cost the county: \$384,000 in 2008, \$336,000 in 2009 and \$339,000 in 2010, and three waves of Green Belt improvement projects have resulted in the following:

Wave	2008	2009
1	Anticipated savings: \$1.3 million Actual savings: \$2.2 million	Anticipated savings: \$2.6 million Actual savings: \$2.5 million
2	N/A	Anticipated savings: \$1 million Actual savings: \$1.6 million
3	N/A	Anticipated savings: \$326,000 Actual savings: \$194,000

Though there are no projections for Black Belt improvement projects, the average project saves \$250,000.

Fiscal savings are complemented by department improvements. In the Department of Mental Health, for example, Lean Six Sigma is revamping how everything is done. Commissioner Philip Endress and his staff are now asking different questions, such as: Are we adding value? Is what we do helping us to achieve our goals? If not, what do we need to do differently?

Ideas and information are being shared. Employees are increasingly learning about the operations of other divisions as they collaborate more frequently because of projects.

Lean Six Sigma is a conduit to lowering costs while still providing services that the public expects, whether it is maintaining parks or faster processing of Medicaid applications. Added up, it eases transactions between consumer and government, and lessens the tax burden on the community.

Obstacles

With any organizational change, there are challenges to overcome. Skepticism, limited time, untrue rumors about Lean Six Sigma's impact, and a smaller-than-desirable initial support network for such a large undertaking are natural obstacles. Identifying the scope of some improvement projects slowed progress in some cases, as well as the challenge of obtaining the cooperation of unions.

Altering an ingrained thought process can present its own obstacles, even if everyone agrees that things need to be done more efficiently. Change isn't easy. As one of the commissioners noted, "I think there's always that pushback saying, 'government is not an industry. We don't produce a product that you can count.'" This mindset makes this type of initiative a little more difficult, however, employees are continually learning to overcome that.

The county has the added pressure of answering to the public and media, as well as the control board. Efforts are being put toward strengthening the consistency and manner in which productivity and financial metrics are reported in a world where outside factors change quickly.

Lean Six Sigma efforts have the best chance to flourish when supported by management. If positions of higher management experience a revolving door among employees, sustaining gains is more difficult.

Changing Erie County

Each floor of the Edward A. Rath County Office Building - the seat of county government - is stamped with slogans promoting Lean Six Sigma, the county's mission and its vision. A specially designed Lean Six Sigma symbol is attached to all forms of communication, and is embroidered on T-shirts, hats and other merchandise. Quite simply, Collins has branded Lean Six Sigma as the way that business is done.

The approach is one piece in the administration's focus on making the community a global gateway. Lean Six Sigma sends a message to entrepreneurs and businesses considering investment in Erie County. Collins' "Road to a Bright Future" economic development plan spells out Lean Six Sigma's intended impact: "We will make our government a partner, not an obstacle, to the business community to help it flourish and prosper."

PRESENTATION COMPONENTS

1. Innovation/Creativity

Lean Six Sigma is empowering county employees to suggest changes to their work processes. As a result, county employees are improving the quality of the services they provide and cutting costs at the same time. With Lean Six Sigma, government is becoming more of a partner, and not an obstacle, to local businesses and the community.

A good example of a new technology implemented as a result of Lean Six Sigma is the improvement project done for the Department of Parks, Recreation and Forestry. The department once used an archaic, paper-based system that hampered the speed by which reservations were secured. The average was 17 days. A new, electronic-based system has quickened the time to verify availability, resulting in a speedier process for the customer. The average is now four days.

2. Outcomes Achieved

Lean Six Sigma has contributed toward improving various services and meeting customer needs. Service delivery has been enhanced, in general, as Voice of the Customer is a standard component of Lean Six Sigma. Access to Erie County government has also been improved. The following examples illustrate improved delivery and access:

- The reservation system has become easier and faster for the 150 park shelters and buildings at nine county parks, as mentioned above. Another part of the project has also improved shelter maintenance by identifying the time needed and adjusting staffing levels appropriately.
- A project dealing with the Family Planning Benefit Program has changed the clinic's culture for both employees and patients. Through better training, re-organization and establishing procedures, clients better understand the Family Planning Benefit Program enrollment process, leading to higher enrollment and subsequently higher reimbursement for the county, equating to freeing up grant money for other needed services.

The health of the community has also improved as a result of this initiative. One project in the Department of Mental Health has diverted children in need of services from unnecessary deep-end levels of care that remove them from their families and community for extended periods. More youth are now able to stay with their families while receiving the care they need from community-based alternatives, instead of the restrictive residential treatment centers (RTCs). The need for juvenile treatment reduced 18 percent from 2007 to 2008, and nearly \$1.5 million in taxpayer savings was realized in 2008.

3. Applicable Results and Real World Practicality

If chosen to present a case study at the 2011 Transforming Local Government/FCCMA Conference, we would share:

- A model for culture change
- Erie County's Lean Six Sigma deployment timeline and infrastructure

- Project savings and examples that include improvements in: park shelter reservation system, paper recycling, delinquent property tax collection, Probation Department Release Under Supervision process, Children's System of Care
- How to be successful

We are able to share monetary results of implementing Lean Six Sigma and examples of how the methodology is changing the culture of county government.

Through training, Lean Six Sigma is appropriate in any type of municipality. Scott Bylewski, supervisor of the Town of Clarence in Erie County, turned to the UB Center for Industrial Effectiveness for its services in January 2009. Clarence is a municipality of 28,700 people with a \$20 million budget. The partnership with the Center has:

- schooled 20 of the approximately 100 full-time employees in Lean Six Sigma basics, of which two went on to pursue a Green Belt
- involved a volunteer business advisory group, a concept borrowed from Erie County
- pinpointed an estimated \$86,000 each year is "lost" in town facility usage through the Parks Department
- examined inefficiencies in the Community Development Department's planning process for large projects, specifically the waste spent on additional meetings and unneeded employee hours

Overall in Erie County, nearly 200 employees have been trained. The Erie County workforce includes 30 Champions, 98 Yellow Belts, 37 Green Belts and 3 Black Belts, with six more Black Belts currently being trained. These employees are actively working on numerous projects in social services, parks, highways, mental health, senior services, central police services, probation, purchasing, budget, health, emergency services, personnel and other county departments.

4. Case Study Presentation

The case study would include a PowerPoint presentation and handouts.