



2015/2016 KING COUNTY EXECUTIVE PROPOSED BIENNIAL BUDGET

King County

In Brief:

- **Vehicle Maintenance Reduces Inventory with Lean;**
- **Lean Helps Elections Count More Ballots Faster and Save Money;**
- **Public Health Clinics Provide More Patient Coverage and Care with Lean Thinking;**
- **King County Is Developing a Culture of Continuous Improvement and Increasing Employees' Productivity and Empowerment.**

Since 2011, King County has been implementing Lean methods for continuous performance improvement. Many governments, businesses, and non-profit organizations use Lean, which was originally developed by Toyota, to eliminate "waste" by carefully reviewing and improving work processes. Lean relies on the insights of the employees doing the work to identify ways to do the work better.

The 2014 budget authorized additional Lean resources, which the County has been deploying toward:

- Transformational improvement projects strategically targeting major value streams;
- Lean leadership development; and
- Building employees' capacity to use continuous improvement tools and thinking.

King County's Lean results to date have included better customer service, more empowered and productive employees, and increased efficiency, including some financial savings. Lean has shown positive impacts in a number of county agencies and in a variety of improvements. A few are highlighted below.

TRANSFORMATIONAL IMPROVEMENT AT VEHICLE MAINTENANCE REDUCES INVENTORY

In the coming biennium, Metro Transit's Vehicle Maintenance division will achieve \$1 million in savings thanks to Lean efforts. Already this year, a project at Ryerson Vehicle Maintenance Base has reduced the dollar value of its parts inventory by more than \$100,000 worth of parts—a big drop in just the first few months of a multi-year initiative. The efficiencies will increase—and the dollars tied up in Vehicle Maintenance inventory will keep dropping—as Ryerson continues and other bases expand upon the Lean improvements.

In early 2014, leaders and staff in Transit's Vehicle Maintenance division saw an opportunity for a Lean transformation of inventory management. The Vehicle Maintenance division had over \$18 million invested in inventory, but as much as one-third of it had not been used in at least two years. Now, staff from Vehicle Maintenance are partnering with the Lean Continuous Improvement Team (CIT) in a multi-year effort to reduce overall inventory levels by 30% and to put systems in place to improve inventory acquisition and management.

The work in Vehicle Maintenance is a pilot Lean "Transformational Improvement." With the Lean transformational improvement approach, King County aims to achieve results crucial to strategic goals in major value streams—in this case, freeing resources by reducing the amount of money tied up in inventory—and also to fully develop Lean continuous improvement methods and thinking in work units.

Vehicle Maintenance staff, with facilitating help from CIT Lean specialists, have designed and trialed four improvement projects at the Ryerson base:

- reducing unused parts by removing parts older than two years, returning some to suppliers to recoup costs;
- optimizing supply levels for remaining parts by adjusting min/max levels of parts on hand;
- restricting the addition of new parts without a proven steady demand in order to reduce the accumulation of unused parts; and
- more effectively moving fleet-specific parts among bases as bus fleets rotate through the system.

Using up some of the existing supply of excess parts and returning unused parts to suppliers has already helped Transit achieve some one-time savings and reduce Ryerson base inventory. This and other recurrent savings add up to \$1 million in the budget for the coming biennium. Procedures to restrict adding new part types have already saved Ryerson at least \$10,000, and probably much more, in unnecessary orders (not buying one unnecessary radiator alone saves \$1,445). Just as importantly, these improvements should prevent surplus parts accumulation in the future.

The Lean work has also given employees the knowledge and tools to identify additional continuous improvement opportunities. Indeed, as these improvements are now being implemented at other county transit bases, the Ryerson employees themselves have been teaching their peers what they learned in these improvement projects and about Lean continuous improvement generally. Employees throughout the division are now increasingly able and empowered to fix the problems they see.



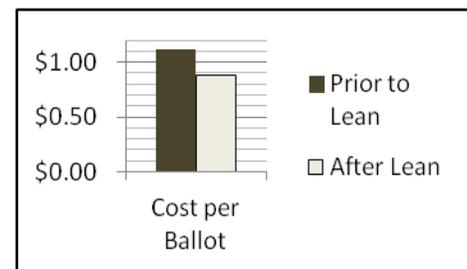
When Ryerson Superintendent Chris Parrot (pointing) looks at the inventory information he now tracks, he says, “*What I see here is a bunch of opportunity.*”

ELECTIONS COUNTS MORE BALLOTS FASTER AND SAVES MONEY

King County Elections has achieved greater efficiency while managing historically high vote volumes and maintaining ballot accuracy and accountability. Rigorously applying Lean continuous improvement thinking to business processes has saved the department nearly \$2 million for the 2015/2016 budget while preserving the integrity of the elections process.

Much of the savings has come by reducing overtime during peak periods—Elections is largely dependent on temporary staff for ballot processing—which means figuring out ways to use staff time more effectively. “Cross training is important,” Elections Director Sherril Huff explains. “In the past, some of our people would serve a single function throughout the election cycle. Now we are moving them to another body of work as needed. There is more production in doing it that way.”

Numerous improvements—everything from improved signature verification to reconfiguring the work floor—have reduced the time required to process ballots and helped cut the cost of processing each ballot by 20%. Elections has also implemented innovations that have improved the maintenance of voter registration information, reduced voter errors that result in uncountable ballots, and increased lead time to address ballot signature challenge issues. Additional Lean improvements in the Voter Services area has reduced turnaround time of voter registration by over 40%.



Huff emphasizes that these improvements have been achieved by asking employees to find solutions to problems. “The people here are an amazing, innovative group. We continue to provide opportunities for people to succeed and present them with challenges.” Lean at Elections hasn't just been a few events; it has been creating an environment of innovation that has made the department a model that other jurisdictions come to study.

PUBLIC HEALTH CLINICS PROVIDE MORE PATIENT COVERAGE AND CARE

A productivity initiative at King County public health centers has enrolled more residents in health coverage—bolstering much needed revenue from non-County sources by as much as \$1 million—and provided more treatment services to the County's most vulnerable residents.

As the seriousness of current public health clinic budget challenges unfolded—largely due to reductions in federal and state funding—King County Community Health Services leadership implemented their Incident Command Structure (typically used during crises such as disease outbreaks) for rapidly developing and testing improvement ideas.

Using Lean problem solving and management approaches, the clinics focused on improving productivity—treating clients as efficiently and effectively as possible—and on increasing patient health coverage enrollment in order to leverage programs and maximize patient generated revenue from federal and state sources. The rigorous use of performance data, productivity targets, and root cause

analysis—“digging into the ‘why?’ when our performance was falling short,” as one CHS leader puts it—has resulted in serving more patients, especially among vulnerable populations like homeless adults, low-income pregnant women, and at-risk mothers and their infants.

“We saw an opportunity to increase visits and provide more services to patients,” says CHS administrator Michelle Pennylegion. For example, when a pregnant woman comes in for Maternity Support Services, staff make sure she is also given the option to also receive dental care.

Public Health Centers will receive approximately \$1 million in revenue in 2014 that would not have been generated without these efforts—and more King County residents have health coverage.

Streamlining the Medicaid enrollment process has led to significant increases in the number of patients with healthcare coverage, allowing the clinics to stretch their budgets and increasing patient access to additional health care providers, including specialists. Patients now have the option of receiving one-on-one enrollment assistance in person or calling a dedicated enrollment assistance hotline at their convenience.

As a result of these efforts to enroll as many people as possible in health coverage, in 2014 Public Health Centers will generate approximately \$1 million in revenue that would not have been received without this initiative. The Downtown Dental clinic, which primarily serves homeless adults, saw one of the biggest changes, from 14% insured in 2013 to 59% insured in 2014.

Despite these efforts, reductions at the federal and state level will force service reductions in the 2015/2016 budget. Had it not been for this work, however, the problem would have been much worse. These efforts have ensured that more of King County’s most vulnerable residents receive services at the remaining clinics and more King County residents have medical coverage.

Developing a Culture of Continuous Improvement

Across the county, other divisions and departments have been integrating Lean methods and tools into their daily activities in order to improve their work and achieve King County goals.

A Lean training and practicum course for managers and team leads in Jail Health Services has resulted in a number of more effective work groups. One team has improved communication and service delivery in JHS’s release planning program, which helps inmate-patients with priority conditions (including pregnant women, individuals with mental or physical health issues or chemical dependency, and others) at time of release to transition to social and health services. With insights from Lean thinking, release planners have been able to assist many more inmate-patients and further the program’s goals of improving health outcomes, addressing social needs, and, ultimately, reducing emergency room visits and jail recidivism.

Regional Animal Services of King County has saved money, made it easier to adopt a pet, and improved the welfare of 4,300 dogs, cats and other animals each year by more quickly uniting them with a loving owner. By emphasizing Lean principles such as eliminating rework and delay, Field Service and Shelter employees have streamlined the intake and adoption processes to reduce the average number of days animals are at the shelter by a full day on average (12 days cut to 11). One big expediter: all required information, such as microchip and vaccination status, is now gathered on the day animals arrive 90% of the time, up from 40% prior to Lean. Animal Services has also improved the time to remove vicious dogs and respond to other citizen concerns.

The Finance and Business Operations Division's work has been reorganized and standardized with an eye to improving value to stakeholders and customers. The division's budget has been developed according to "functional value streams"—complete and coordinated work activities often involving several agencies—that deliver clearly defined products and services to customers. FBOD has identified which processes they can improve themselves and which they must work with internal and external stakeholders to improve.

Leaders in Mental Health, Chemical Abuse and Dependency Services have mapped their service delivery systems, links with other organizations, and funding sources in order to find efficiencies, identify gaps, and more productively manage the pathways to recovery for people in need. This visual management, a tenet of Lean, has helped the division leverage programs and funding sources in order to serve target populations.

Making the work visible also facilitates problem-solving and shared work between the Department of Adult and Juvenile Detention and Jail Health Services. With strong visual management systems in King County jail mental health units, inmate-patients are visually tracked on boards in real time, allowing all staff in the unit to know scheduled follow up, behavioral observation, and care planning next steps. Cleverly designed locking marker boards protect patient privacy while allowing staff to see necessary information.

The People Who Do the Work

Lean emphasizes respect for people and developing King County employees is the most enduring continuous improvement contribution. Approximately 700 employees have participated in multi-day Lean "kaizen" events. Many other employees have learned about Lean through activities such as value stream mapping, site tours, presentations, and event report-outs.

These and other training platforms equip employees and work teams to use Lean continuous improvement tools and thinking, promoting the Lean principle of "respect for people" by empowering employees to implement work improvements and facilitating front-line problem solving.

With Lean I've seen a greater sense of empowerment among line staff. For the first time, we were asked what we saw as the problem and what counter-measures we would recommend.

- Bill Goldsmith,
Community Services
Division