Progress Report on Lean Management Strategies

July 2016
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Executive Summary

Launched in late 2013, the state’s Results Washington initiative is continuing to help drive improvements on dozens of specific, measurable goals across five overarching goal areas:

- education
- the economy
- the environment
- public health and safety
- and effective government.

Under those categories, Results Washington is tracking a total of 191 specific objectives. Many represent complex challenges, such as homelessness, struggling students, pollution, offender recidivism, traffic fatalities, smoking, teen pregnancy and loss of critical habitat.

Results Washington, part of the Office of the Governor, tracks the data and brings together multi-agency teams to work collaboratively on data-driven strategies.

Of the 191 objectives Results Washington is tracking:

- 52 percent are on track to meet the targets.
- 38 percent need improvement.
- 10 percent are in the early stage where agencies are collecting baseline data or are trying to determine the best ways to measure progress. (In many cases, these are objectives that were recently added.)

In addition, the use of Lean management principles and techniques in state government has led to hundreds of localized improvement efforts at individual state agencies. Lean is helping improve quality, improve timeliness, and manage growing workloads and demands for services.

A summary of some of those projects is below. We have also posted details for the 67 reports submitted in this six-month cycle (July 1, 2015 through Dec. 31, 2015) in an online appendix to this report.

This work has made Washington state a national leader in the use of Lean principles in the public sector, with multiple other states interested in learning from Results Washington and creating their own data-driven, customer-focused improvement systems.

It is also important to note that much work remains. Many Results Washington objectives focus on complex challenges with which the state has struggled for decades. And while state government continues to evolve into a Lean organization, cultural change on this scale takes time.

We sincerely appreciate the Legislature’s support and interest in this work to make state government more effective at getting results that matter to the lives of Washingtonians.
Creation of Results Washington

In September 2013, Gov. Jay Inslee issued Executive Order 13-04, which stated, in part, that:

Washington state and its public servants are committed to the continuous improvement of services, outcomes and performance of state government, to realize a safe, beautiful and healthy place to live and work. In order to achieve these aims, “Results Washington,” an innovative, data-driven, performance management initiative will drive the operations of state government through Lean thinking. This initiative will aid state leaders in fact-based decision-making, enhancing the breadth of understanding, focus and commitment to our customers — all Washingtonians.

The order laid out a framework for citizen and employee engagement, cross-agency collaboration, reporting and sharing of results with the public.

Results Washington is built around five key goal areas:

1. **World-class education**: Preparing every Washingtonian for a healthy and productive life, including success in a job or career, in the community and as a lifelong learner.
2. **Prosperous economy**: Fostering an innovative economy where businesses, workers and communities thrive in every corner of our state.
3. **Sustainable energy and a clean environment**: Building a legacy of resource stewardship for the next generation of Washingtonians.
4. **Healthy and safe communities**: Fostering the health of Washingtonians from a healthy start to a safe and supported future.
5. **Efficient, effective and accountable government**: Fostering a Lean culture that drives accountability and results for the people of Washington.
Within those five goal areas, there are 191 measures created with input from hundreds of Washingtonians, dozens of stakeholder groups and state agencies.

For example, the healthy and safe communities goal includes efforts such as:

- Decreasing the infant mortality rate from 5.1 per 1,000 births in 2012 to 4.1 or fewer per 1,000 births by December 2016.
- Increasing toddler vaccination rates from 65.2 percent in 2012 to 72.6 percent by December 2016.
- Decreasing workplace fatalities from 2.7 per 100,000 full-time workers to 2.5 or fewer per 100,000 full-time workers by December 2016.

**How Results Washington is Structured**

For each goal area, Results Washington created a team, known as a “goal council,” comprised of 12–15 state agency directors. Each member brings to bear the expertise, perspective and
resources of his or her agency. Collaboration among the agencies and other partners is a key part of working on many of these complex objectives.

Each of the 191 improvement measures has an agency director assigned as the lead. In most cases, however, multiple agencies and partners work together on a measure. This helps leverage each other’s work, avoids redundant effort and maximizes the learned expertise of the group.

For example, the state faces a major challenge in reducing traffic fatalities. Drinking, drug use, speeding, driver age, distractions and other factors all play a role. Under Results Washington’s structure, the efforts to reduce traffic fatalities are led by the Washington State Patrol, which works closely with the state Traffic Safety Commission, the Department of Licensing, the Department of Transportation and other entities. Each of those agencies has specific strategies and action items related to reducing traffic deaths.

The five goal councils meet monthly to review progress, share data, refine strategies and collaborate on action items. These meetings often include partner organizations outside state government. They also often include customers, clients or other Washingtonians who provide a valuable perspective of their own experiences.

Ten times a year, Gov. Inslee meets with individual goal councils to discuss what’s working, what’s not and how to improve results. These meetings also often include customers and clients. The meetings are open to the public and streamed live over the internet. The agendas, data, presentations and video recordings are available on Results Washington’s website.

Examples of improvements

See below for a few examples of results in each goal area.

EDUCATION

The four-year graduation rate for high school students rose from 76 percent (class of 2013) to 77.2 percent (class of 2014) to 78.1 percent (class of 2015). (data link)

The percentage of school districts offering effective dropout prevention programs rose from 30 percent in 2014 to 47 percent in 2015. (data link)

The percentage of recent high school graduates needing pre-college or remedial courses in college has dropped from more than 40 percent in 2010 to 33.2 percent. (data link)

The number of college students enrolled in high-employer-demand programs at the state’s four-year colleges and universities rose from 29,284 in the 2010-11 school year to 34,380 in 2014-15. (data link)

The number of community and technical college students taking online courses rose by more than 5,300 in two years. (data link)
The percentage of eligible students who sign up for the College Bound Scholarship program rose from 79 percent in the 2011-12 school year to 91 percent in the 2014-15 school year. (data link)

**ECONOMY**

From 2011 through 2014, gross business income in Washington state increased from $614 billion to $734 billion. (data link) For small businesses, it rose from $189 billion to $219 billion. (data link)

The average earnings of Washington workers rose from $49,894 in 2011 to $54,829 in 2014. (data link)

The percentage of people participating in the state’s WorkSource program who find jobs rose from 52 percent in 2011 to 65.6 percent in 2015. (data link)

Employment in several key sectors has also risen. From 2011 through 2014, employment rose 31 percent in information/communication technology, 54 percent in maritime and 11 percent in agriculture. (data link)

State efforts to make 423,000 acre-feet of new water supply available for agriculture by 2020 are on track. (data link)

**ENVIRONMENT**

The percentage of Endangered Species Act-listed salmon and steelhead populations at healthy, sustainable levels increased from 16 percent in 2010 to 21 percent in 2015. (data link)

The percentage of endangered, threatened or sensitive wildlife species considered to be recovering has risen from 28 percent in 2013 to 30 percent in 2015. (data link)

The percentage of Washingtonians living in a place where air quality meets federal standards rose from 92 percent in 2014 to 100 percent in 2015. (data link)

The number of contaminated sites cleaned up has risen from 5,815 in June 2012 to 6,527 in March 2016. Contaminants include petroleum products, metals, pesticides, solvents, dioxins and PCBs. (data link)

Diesel soot in the air continues to decline (data link) and the number of old woodstoves replaced with certified woodstoves or alternatives is increasing. (data link) Diesel soot is about half what it was a decade ago, and more than 3,000 old woodstoves have been replaced in the past five years.

Working farm acreage in Washington rose from 7.15 million acres in 2010 to 7.31 million acres by the end of 2015. (data link)

Outdoor recreation rates are rising in Washington’s public lands and waters. From fiscal year 2012 through fiscal year 2015, there were significant increases in the number of hunting licenses, fishing licenses, Discover Passes and daily permits purchased. (data link) In 2015, Washington issued 60,000 more hunting licenses, nearly 90,000 more fishing licenses and 159,000 more Discover Passes than in 2012.
**HEALTH AND SAFETY**

Cigarette smoking by 10th graders continues to decline, from 13 percent in 2011 to 8 percent in 2014. ([data link](#)) Drinking is also decreasing, with the percentage of 10th graders reporting drinking alcohol in the past month dropping from 28 percent in 2010 to 21 percent in 2014. ([data link](#))

The number of ex-offenders getting jobs after release from prison increased from 31 percent in 2013 to 38.1 percent at the end of 2015. ([data link](#)).

Speed-related traffic deaths dropped from 184 in 2013 to 156 in 2015. ([data link](#))

Workplace injuries leading to 3 or more missed days of work have dropped from 1,644 per 100,000 full-time workers in early 2010 to 1,339 in the third quarter of 2015. ([data link](#))

The teen pregnancy rate is half of what it was in 2008. Among 15-17-year-olds, the pregnancy rate in 2008 was nearly 27 out of 1,000 girls. In 2014, the rate was 13.3. ([data link](#))

**EFFECTIVE GOVERNMENT**

Employee-driven Lean improvements at dozens of agencies have resulted in easier-to-understand forms, streamlined processes, faster services, better outcomes, cost avoidance, more transparency and higher customer satisfaction.

In addition, the [online appendix to this report](#) contains details on more than 200 agency Lean projects over the past 18 months, including 67 in the most recent six-month reporting cycle.
Performance Accountability

Each month, Results Washington assesses the status of all 191 measures. As of June 1, 2016:

- 99 measures (52 percent) were on track to meet their targets.

- 73 measures (38 percent) will need to improve if they are to meet their targets.

- 10 measures (5 percent) are in the process of establishing baseline metrics.
In the case of 9 measures (5 percent), we are working to determine the most effective metrics to track performance.

The target dates of measures range from the near-term to a few measures that have targets in 2020 and 2030. (We’re aiming for a goal of zero traffic fatalities, for example, by 2030.) The vast majority of measures have targets in 2016 and 2017, as shown in this chart:
Building a Lean Culture

Ultimately, Results Washington’s emphasis on Lean principles is about building a lasting culture of customer-focused problem-solving throughout state government. Lean problem-solving focuses on trying to address root causes rather than treating symptoms.

Although Washington has a long history of performance management and improvement initiatives (described in Appendix B), previous efforts often tended to focus narrowly on specific processes or services at individual agencies. The Results Washington structure and goals are
more comprehensive, requiring an unprecedented level of data-driven collaboration among agencies.

Washington is well on its way toward becoming a Lean organization. The state is a recognized leader nationwide in adapting Lean principles and techniques to make government more efficient and effective.

A large part of this cultural transformation has consisted of hands-on improvement efforts by employees and managers. From early 2013 through Dec. 31, 2015, agencies reported that their staff took part in 2,069 Lean projects.

<table>
<thead>
<tr>
<th>Cumulative number of Lean projects reported (unduplicated)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan-July</td>
</tr>
<tr>
<td>309</td>
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Lean Improvement Education

In partnership with the Department of Enterprise Services and other agencies, Results Washington is helping expand state employees’ understanding of the Lean philosophy and tools. The state is piloting a broad approach that covers elements of process improvement, employee development, leadership behaviors and management systems. We have deliberately allowed agencies to pursue Lean learning strategies that best fit their individual agency cultures, while working closely to maintain a shared general direction and principles.

From 2013 through 2015:

- More than 31,000 Washington state employees have had Lean knowledge and skills training. Of those, more than 3,300 had problem-solving training, which was introduced in 2015.
• More than 750 employees have been trained as Lean facilitators.

• More than 11,000 state employees have participated in a Lean improvement project.

Lean Engagement by the Numbers
2013 - 2015

Number of IMPROVEMENT PROJECTS

2,069

To support a culture of problem-solving we need leaders as Coaches
341 trained in 2015

Problem Solving training started in 2015 for employees and leaders
2,285 employees
1,052 leaders

Agencies submitted 227 strategic lean project reports
In 2014 and 2015

OVER 11 K Employees have participated in an improvement project

Over 31,000 employees have had basic lean knowledge and skill building since 2013.

Data Note: This data is self-reported by agencies from January 2013-December 2015.
Annual Washington State Government Lean Transformation Conference

A major part of this effort is an annual two-day Washington State Government Lean Transformation Conference that brings together more than 2,000 people — most of them state employees — to learn about Lean principles, tools and lessons learned.

Presenters include state agency and Result Washington staff. They also include a broad cross-section of Lean experts — all of whom volunteer their time for this event — from private-sector and nonprofit organizations. The 2015 conference included presenters from Toyota, the Gates Foundation, Virginia Mason Medical Center, Seattle Children’s Hospital, the United Kingdom’s National Audit Office, the Lean Enterprise Institute, Seattle City Light and Premera Blue Cross.

The 2015 conference included more than 55 sessions, over 100 presenters, more than 1,500 state employees, and attendees from 13 city governments, eight county governments and seven institutions of higher education.

2015 Lean Transformation Conference Summary

2015 Lean Transformation Conference

By the Numbers

13 city governments

Seattle Tacoma Redmond Issaquah Tukwila Sammamish Burlington Rainbridge Renton Auburn SeaTac Vancouver Riverside

7 institutions of higher education

 UW WSU MIT St. Martin's CPTC Evergreen Bellevue

More than 1,500 state employees

Washington State employees registered for this two-day conference

90 volunteers

from: state agencies higher education nonprofit organizations local and federal agencies Lean consulting firms

2,400 lbs. of food donated

Food donations provided:
3493 meals
39 people fed
3 meals a day
1 full month of meals

117 people from the private sector

representing: aerospace retail financial health information technology food and beverage

more than 2,000 people

attendees and participants making it the largest event of its kind in the country

8 county governments

Kitsap Pierce Snohomish Skagit Clark Cowlitz Los Angeles Benton
Lean Agency Advisers

A key link to agency leadership, the Lean Agency Advisor Community of Practice comprises 54 advisers appointed by agency directors. Results Washington staff and partners provide training, information and coaching to the advisers, who also model and discuss their own Lean efforts with their colleagues at other agencies. The group also helps provide agency perspectives on strategies for continuing to advance state government’s Lean transformation.

Lean Fellowship Program

On a rotating basis, five Lean fellows are loaned to Results Washington by state agencies for intensive one-year fellowships where they gain a deeper understanding of Lean and develop skills in facilitation, leadership and problem-solving. Each fellow puts those skills to practical use on key goals.

Summary

As Washington state government continues to learn and embrace Lean problem-solving, we’re refining and improving our own Results Washington system.

The early work in 2013 focused on designing and developing the Results Washington framework, setting up processes and working with agencies and partners to establish goals and measures that mattered most to Washingtonians.

In 2014, we implemented and experimented, testing different approaches for tracking performance and working with agencies on data-driven strategies. Agencies expanded their use of Lean for internal improvements, and we started to see early results on some of the major cross-agency Results Washington goals.

In 2015 and beyond, Results Washington continued to evolve, applying new standards, setting up a framework to involve more partners and expanding our efforts across state government. More than half our enterprise-wide goals are on track to meet or beat targets. Agency staff have taken part in more than 2,000 localized Lean improvement efforts. In the spirit of Lean, we continue to test and refine strategies and our structure as we strive to broaden these innovations in state government.

Much work remains. At its essence, Results Washington is an effort to build the principles and spirit of measurable, continual improvement into the DNA of state government. Cultural transformation on this scale takes time, leadership and steadfast encouragement to innovate and experiment. In addition, many of the Results Washington goals are “stretch goals” that require major effort from multiple players.
We are greatly encouraged by the results we’ve seen so far, in both metrics and culture, and strongly believe in the power of innovation, collaboration and data-driven cycles of continuous improvement in making government better.

**Appendix A: Examples of Agency-Level Improvements**

Washington Technology Solutions saved an estimated $500,000 – as well as staff hours for its customers – by using existing technology to automate a painstaking monthly manual billing process involving more than 300 organizations. They also streamlined the work to dramatically decrease errors, improved customer satisfaction and redirected staff hours saved into financial analysis and front-line customer support.

The Department of Enterprise Services cut 31 weeks off of review time when a work order is submitted to when the construction begins. The time went from 41 weeks to 10 weeks.

The Department of Enterprise Services decreased by two-thirds the time to pay training vendor invoices.

The Department of Financial Institutions cut the amount of time spent processing securities documents from 80 minutes a day to 5.

The Department of Licensing reduced a billing cycle from 6 days to less than two, while also decreasing errors by two-thirds.

The Department of Licensing standardized processes to cut handling time for contracts from 280 minutes per contract to 95 minutes, while shrinking the contract approval form from 4 pages to one.

The Department of Labor and Industries reduced by 18 percent the amount of time it takes to review and issue a determination to employers who requests variances from published safety rules.

The Office of Administrative Hearings saved $12,000 in three months by changing how it used interpreters for some hearings.

The Office of Administrative Hearings automated much of the process of manually calculating and preparing certain federal reports, cutting the time it takes from 291 hours to 32 hours and reducing error rates to zero.

The Office of Family and Children’s Ombuds simplified the process for submitting complaints, leading to a 32 percent increase in submissions as well as a 60 percent decrease in calls from people needing help with the process.

The Department of Fish and Wildlife decreased the time to process a scientific collection permit from an average of 164 minutes to 67 minutes.
The Washington Military Department reorganized the supply area and cut the time to issue gear to a military unit from more than 5 minutes per soldier to 1.8 minutes, saving the unit more than three hours of waiting at each monthly drill.

The Washington Military Department reduced the promotion process wait time for junior enlisted soldiers from nearly 35 days to less than 6 days.

The Washington Military Department streamlined the in-processing of soldiers at Officer Candidate School from 90 minutes per soldier to 23.

The Washington Military Department eliminated a 123-day delay in retention bonuses being paid to soldiers.

The Washington Student Achievement Council cut by two-thirds the time it takes to process thousands of College Bound Scholarship applications. It previously took 408 hours to process 16,000 applications; it now takes 135 hours.

The Washington State Department of Transportation eliminated the requirement for more than 670 aircraft owners to submit justification documents when requesting a registration exemption for non-airworthy aircraft. The documentation, which used to take about two hours for customers to complete, now takes about two minutes.

The Washington State Patrol reduced the processing time for forensic DNA tests by 20 percent, allowing the Marysville Crime Lab to handle a record number of cases in 2015.

Details and metrics for all of these projects, as well as many others, are posted online at http://results.wa.gov/what-we-do/measure-results/legislative-reports/agency-list.
Appendix B: Performance Management in Washington State Government

Washington has a proud history of pioneering innovative approaches to making state government more efficient, transparent, accountable and effective. Among the milestones:

- Priorities of Government (2002): A framework for spending decisions based on the results Washingtonians expect from government and the strategies most effective in achieving those results.
- Lean Transformation (2011): The first steps toward building a Lean culture in Washington state government. Then-Gov. Christine Gregoire directed all executive cabinet agencies to explore the use of Lean principles, complete a Lean project, compile results and lessons learned, and deploy efforts to build capacity for using Lean in their operations.

Results Washington is built on that legacy, retaining key aspects of past efforts such as a focus on measurable results that most matter to Washingtonians.

Results Washington also broadens the focus beyond individual agency results, driving improvements through multi-agency work groups that bring broader viewpoints, strategies and resources to bear on the challenges faced by citizens.