

## Notable results

- *WSDOT has initiated more than a dozen Lean projects in the past year to improve processes and create efficiencies*
- *The sign fabrication project reduced sign prices 25% per square foot, while doubling the number of signs manufactured*

### Governor's Office supports Lean

Governor Jay Inslee has championed Lean, integrating it into his *Results Washington* approach to statewide performance management, "Lean provides proven principles that are helping Washington state government create a culture that encourages respect, creativity, and innovative problem solving, continuously improves and eliminates waste from government processes, aligns efforts across state agencies and delivers results that matter to Washingtonians."

### Collision record data entry process improvement reduces backlog by 68 percent

*Gray Notebook* 44 reported that collision records were piling up in WSDOT's Statewide Travel and Collision Data Office (STCDO), creating a significant backlog. Redundancies and inefficient top-down decision making were not focusing on what was best for the customers. By December 2011, the backlog had grown to seven months (measuring the time between when the collision record was received and when it was processed and available to customers). The team projected that the backlog would grow to nine months by June 2012, and it very nearly did.

STCDO's Collision Branch kicked off their Lean project in June 2012. The branch's staff of 22, plus two Information Technology (IT) support workers, spent four days visually mapping the collision data flow processes. Staff that had been suffering under the increasing workload stepped forward and offered their ideas. These were prioritized and some changes started to occur; however, the door that had been opened to staff in June seemed to be slowly closing.

Executive management brought in new leadership. Almost immediately, the culture started to change. What the staff affectionately calls Lean Boot Camp happens every week. The staff members that had the improvement ideas in June are now a part of planning and implementing the ideas. They are given an opportunity to learn skills that involve critical thinking, problem solving and work planning. Most of all, they were given a voice to positively influence and improve their work environment and processes.

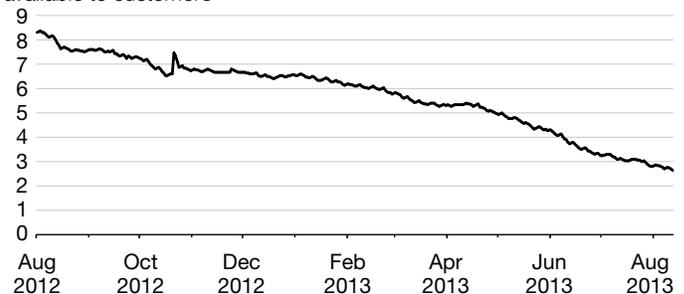
The backlog of collision records improved 68 percent in one year (August 2012 through August 2013), and it is continuing to decrease. This progress was achieved with two fewer staff members.

Lean works. There are Lean tools and methods that are highly effective and basic principles to guide teams, including:

- Understand what customers value, and focus key processes and services to continuously increase customer value
- Optimize the flow of products and services through the entire process
- For solutions, listen to the people who do the work

### WSDOT's collision record backlog declines 68 percent

*August 2012 through August 2013; Backlog in number of months between when the collision record arrives and when it is processed and available to customers*



Data source: Statewide Travel and Collision Data Office (STCDO).

Note: The Lean project was launched in June 2012, when the backlog was nearly nine months.

### Traffic data workflow processes improve

The Travel Data and Analysis branch of STCDO also undertook Lean projects to address technology issues and improve workflow processes. For example, recoding traffic software to work with the Windows 7 operating system (OS) eliminated most technology issues and brought them in line with the agency's OS standard; changing processes so equipment issues are identified sooner minimized loss of traffic data; and distributing traffic data in electronic formats such as Excel satisfied their customers. The team continues to search for more ways to streamline their processes and offer high-quality data to their customers.

## WSDOT reports progress on six Lean projects as of June 30, 2013



WSDOT has initiated more than a dozen Lean projects in the past year (scan the QR code to see [Gray Notebook 49, pp. 76-78](#)) to improve inefficiencies and processes that do not meet customers' needs.

WSDOT has been learning about the Lean process and what it has to offer to address identified issues and improve the way the agency does business. This quarter's progress and benefits of six projects are presented here. Other Lean projects are also underway.

### Project, program, and description

### Results achieved this quarter

#### COMPLETED: Streamline sign fabrication process

*Maintenance Operations (Central Sign Shop)*  
Streamline sign ordering, fabrication, and shipping processes to reduce the number of price adjustments necessary to maintain cost recovery and decrease overall lead time.

- Average price per square foot reduced 25%
- Manufacturing of signs increased: Total square footage per month by 46%; total number of signs per month by 219%
- Rush and emergency orders reduced from 20% of all orders to 5%, including Skagit River Bridge emergency signs

#### Reduce collision data backlog

*Strategic Planning (Statewide Travel and Collision Data Office)*  
Supply customers with complete, accurate and timely collision data by streamlining collision data processing and reducing the data backlog.

- The time until a fully analyzed collision record is available to customers dropped from 5.2 months in April 2013, to 3.3 months in June 2013. It was further reduced to 2.6 months at the time of publication.
- Finished workflow process modification in June, reducing the number of times staff handles a collision report from three to one

#### Reduce WSDOT's fish passage project design timeline

*Development Division (Environmental Services Office)*  
Increase collaboration efficiencies between WSDOT and the Washington Department of Fish and Wildlife during fish passage barrier correction project scoping, design and construct.

- Completed Future State Value Stream Mapping workshop with WSDOT and WDFW staff (June), and developed implementation plan to be launched in July 2013
- Revised fish passage project design process and consolidated process steps, resulting in a shorter design time frame

#### Standardize traffic count data collection process

*Strategic Planning (Statewide Travel and Collision Data Office)*  
Automate process for collecting traffic counts in the field with a focus on improved data reliability, reduced data loss, and saving time.

- Standardized equipment list carried in van eliminated trips to pick up supplies and increased productivity by about 5%
- Disseminated standardized site information, reducing crew paperwork errors and increasing yield by about 5%
- Improved coordination between field data crews and maintenance/construction crews reduced work area conflicts and the need to reschedule by about 5%

#### Standardize Ferries digital schedule updating

*Washington State Ferries Division*  
Streamline process for publishing and maintaining the sailing schedule to eliminate published schedule errors.

- Received signature approval on project charter, authorizing launch of project and its objectives

#### NEW: Improve information and process flow for traffic data collection

*Strategic Planning (Statewide Travel and Collision Data Office)*  
Reduce time between retrieving and validating data from permanent traffic data collection sites; Identify equipment issues sooner, reducing loss of traffic data.

- Lean and value stream mapping training, May 2013; captured 41 potential Kaizen<sup>1</sup> Bursts at team meetings, to be prioritized
- Automation of Oregon Transportation Data input process reduced office processing time by about 40% monthly



Data source: WSDOT Strategic Planning and Development divisions, Washington State Ferries, and Maintenance Operations.  
Note: 1 Scan the QR code to see [Gray Notebook 48, p. 66](#), for a description of Kaizen.

Contributors include Ted Bailey, Jackie Bayne, Lori Beebe, Dave Bushnell, Kathy Dawley, Mark Finch, Nadine Jobe, Kathy Lindquist, Leni Oman, Sayee Vaitheesvaran, Paul Wagner and Anna St. Martin