

Black Belt Lean Six Sigma Project Report Out
Andrew Cochran
Department of Administrative Services
February 15th, 2018



State Surplus Program

Team Members

Administrative Services

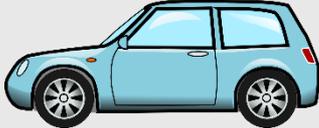
- Mary Sen, Fiscal SME
- Ken Henault, Fiscal Manager
- Amy Rice, Surplus Manager
- Tom Lowery, Surplus Staff
- Mark Young, Surplus Staff
- Jeff Scanlan, Surplus Staff
- Larry McConnell, Surplus Staff
- Angelo Serra, DAS
- Rohan More, DAS
- Craig Finck, DAS

Customer Participants

- Bill Simon, DAS
- Randy Hawk, DPS
- Duane Rundio, DPS
- Ed Ogburn, COM
- Jennifer Harter, OBM
- Spencer Carey, OBM

Background / Scope

- State Surplus' use of manual processes and outdated IT systems causes operational inefficiencies and is unsustainable.
- Scope:

	Customer Scope	Inventory Scope
First Step:	Application submission 	Surplus property identified 
Last Step:	Application expiration 	Refund issued to state agency 

Project Goals

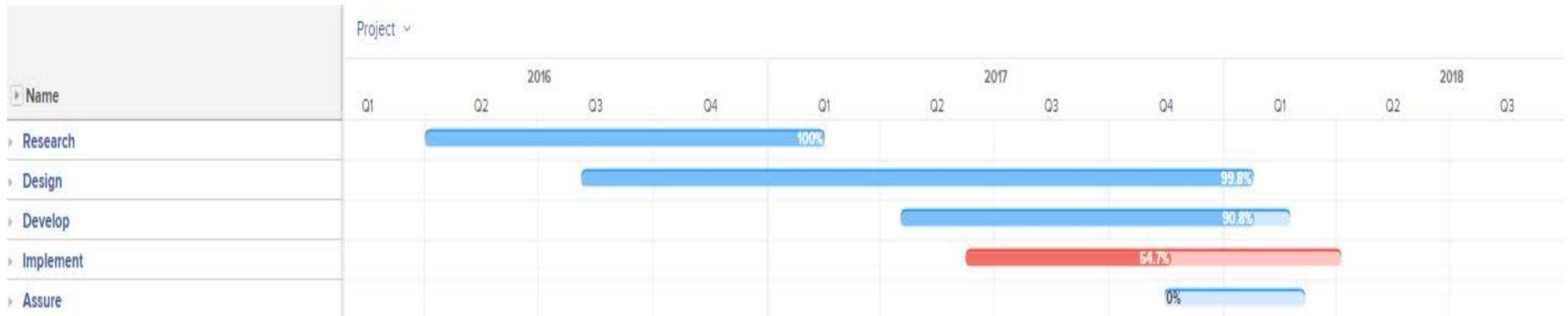
Project Benefits

- Enables core business transactions to be conducted more efficiently
- Retires standalone systems, reduces siloes of information, and positions staff to focus on more valuable and strategic targets

Goals

- Reduce number of systems by 50%
- Reduce time needed to enter new customer data by 66%
- Reduce number of customer data inconsistencies by 100%
- Establish a comprehensive inventory system

Project Plan



Baseline Data

Measure	Baseline
Number of systems used to store customer information	4 Systems
New customer entry cycle time	33 Minutes
Number of customer ID formats	5 Formats
Required Customer Information Captured in System	52%
Number of customer data inconsistencies	57
Number of days until miscellaneous property is completely inventoried	50 days
Warehouse Auction Prep Time	48 Hours Annually
Time to find a turn-in document	4 minutes

Other key data points were not available with the old way of doing things...

Data Collection Plan

- 17 performance measures
- Gemba walks
- Interviews
- System queries, reports



Tools Used

- DMAIC
- Project Charter
- 4 Voices
- Operational Definitions
- Standardization
 - Standard operating procedures

OhioDAS General Services Division Project Charter
OFFICE OF INFORMATION SOLUTIONS
DEPARTMENT OF ADMINISTRATIVE SERVICES

1. General Project Information	
Request Date	2/1/2016
Project Name <small>Provide a brief, authoritative name for the project.</small>	Surplus Cash Register Retirement
Project Manager/Lead <small>Identify the project lead.</small>	Andrew Cochran
Project Sponsor <small>Identify the project sponsor, if known.</small>	Erik Yessenoff
Program Owner <small>Identify the business owner responsible for steady state operations, versioning, and management.</small>	Andrew Cochran
Estimated Duration <small>Rough estimate of project length.</small>	18 Months
Expected Start Date	4/1/2016
Expected End Date	12/30/2017

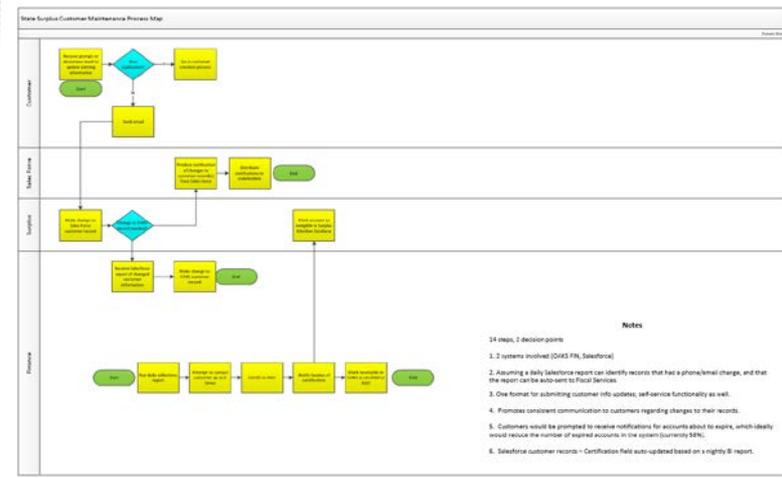
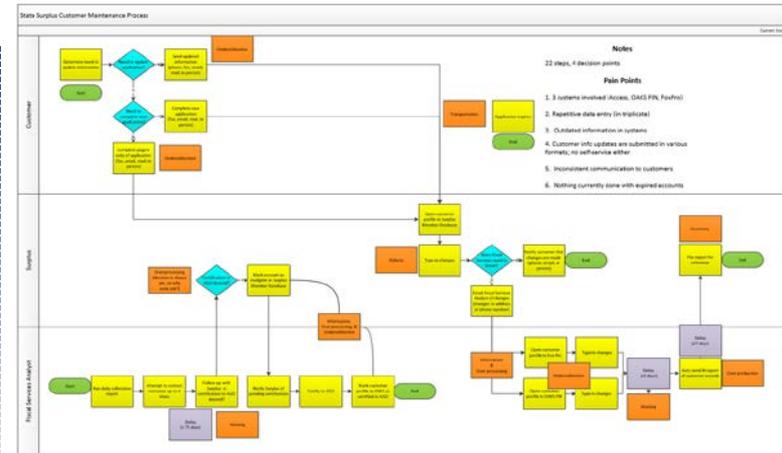
2. Business Problem or Issue, Project Description, Goals, and Objectives	
Problem or Issue <small>Describe the problem being solved.</small>	<p>State agencies continually have a need to dispose of excess or surplus property. Generally speaking, agencies need to turn this property over to State Surplus where it is sold. State Surplus, a part of the General Services Division (GSD), follows the rules established by Section 123.13 of the Ohio Revised Code (ORC) and sells the surplus items to state agency and non-state agency customers. Then, the DAS Office of Finance (DAS Finance) returns the proceeds of those sales to the agency following the rules established by Section 332.14 of the ORC. A portion of those proceeds are retained by State Surplus to fund the operation of the State Surplus program. Currently State Surplus uses manual processes and the Cash Register, which is a computer program (henceforth known as the Foxtro System), to facilitate and report on these processes.</p> <p>The application is currently running on virtual machines and there have been numerous operating issues to address as a result of running in this new environment. The software that the Foxtro System is based on is outdated and is no longer supported by Microsoft and may cease to function under new releases of Windows. To ward off the potential calamity, a new system is needed.</p>

4. Implementation (State Surplus, DAS Finance, customer agencies, OH)
3. Assurance (State Surplus, DAS Finance)

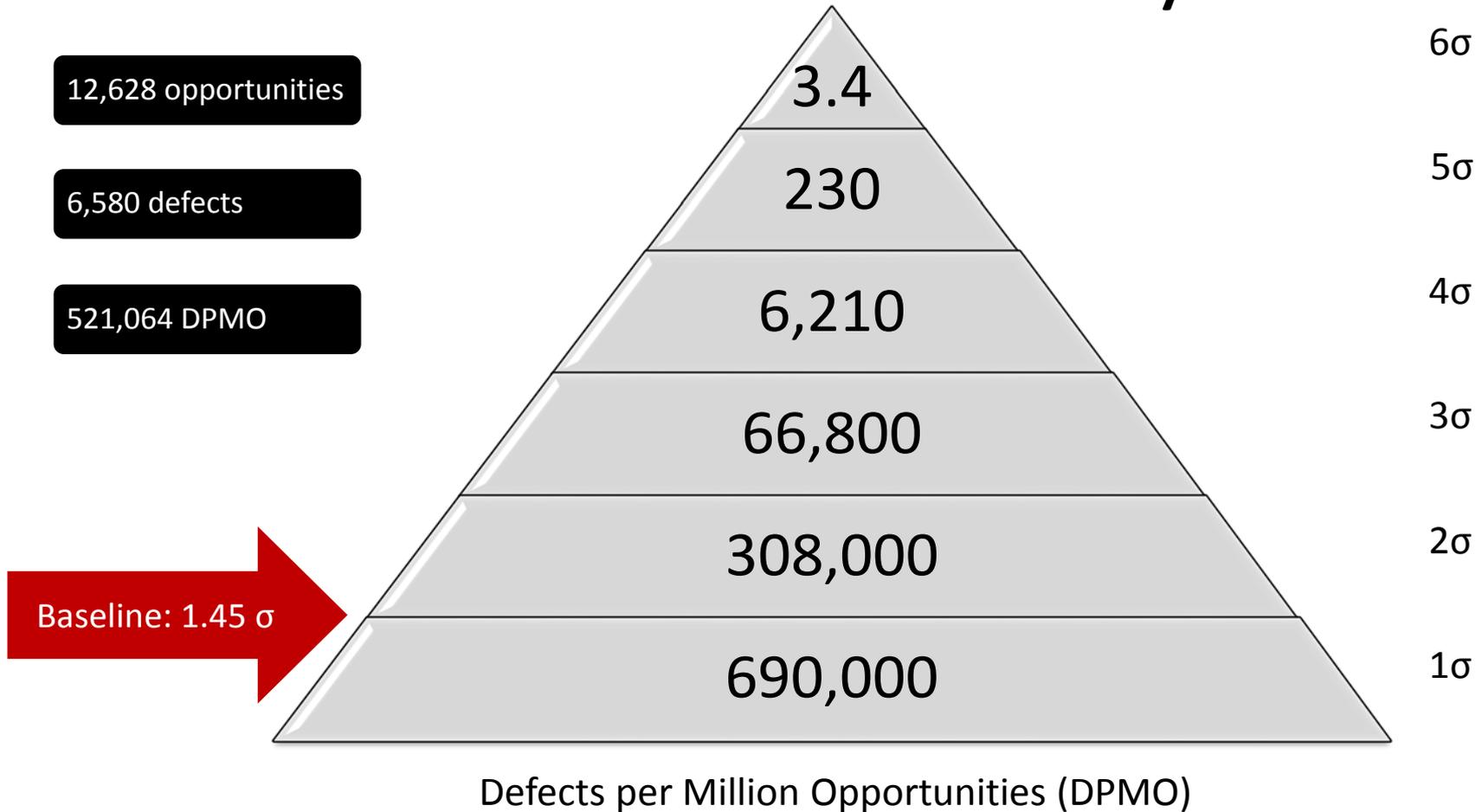
Key Project Milestones/Deliverables	Start	Complete

Process Mapping

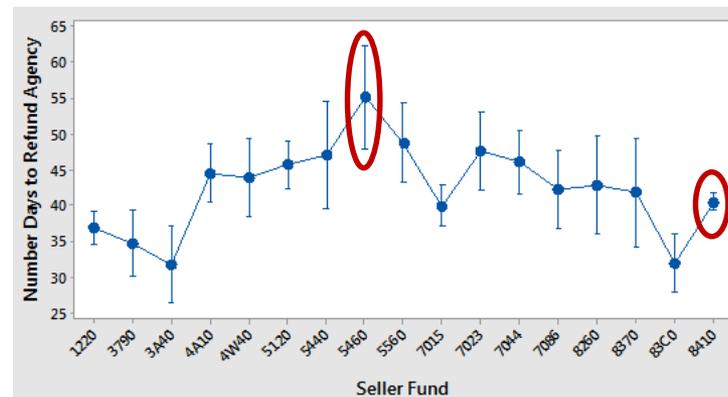
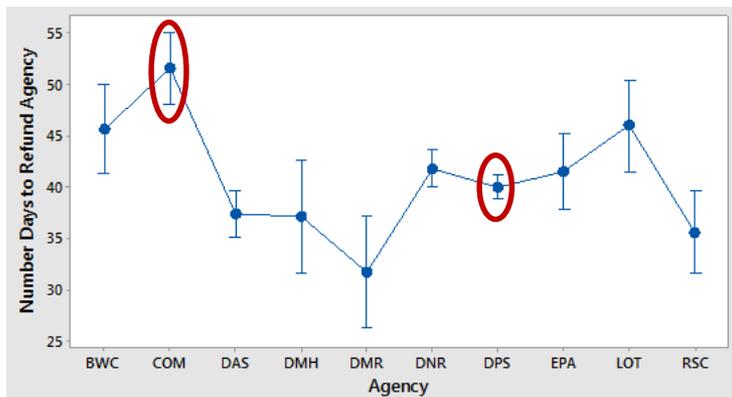
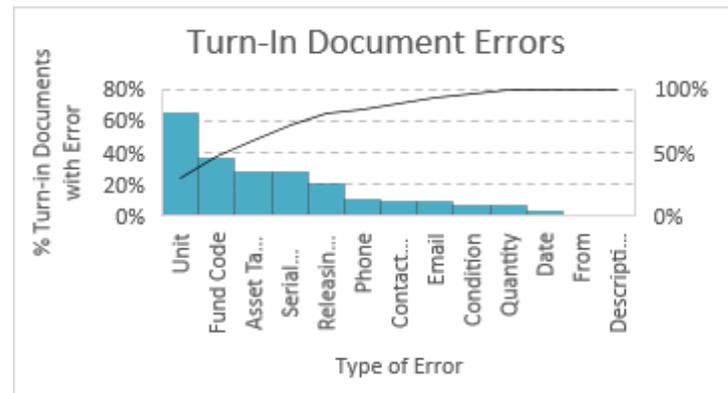
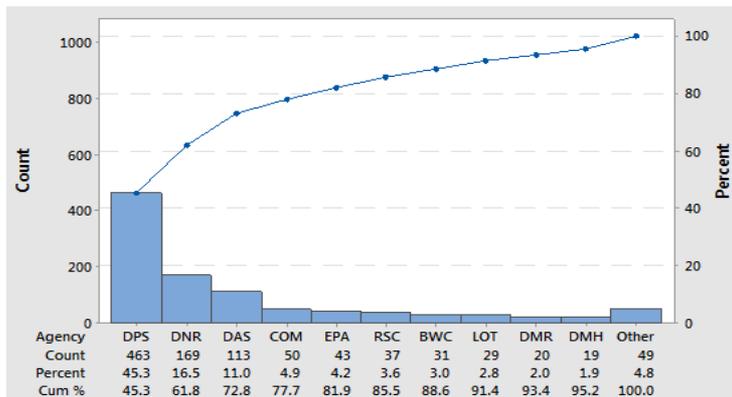
- 8 processes mapped
 - Customer application
 - Customer maintenance
 - Miscellaneous property turn-in
 - Vehicle turn-in
 - Auction
 - State invoice
 - Federal invoice
 - Agency refunds
- Waste identification
- Brainstorming
- 34% reduction in steps
- 22% reduction in decisions



DPMO and Sigma Level: Customer Data not in System



Graphical Displays

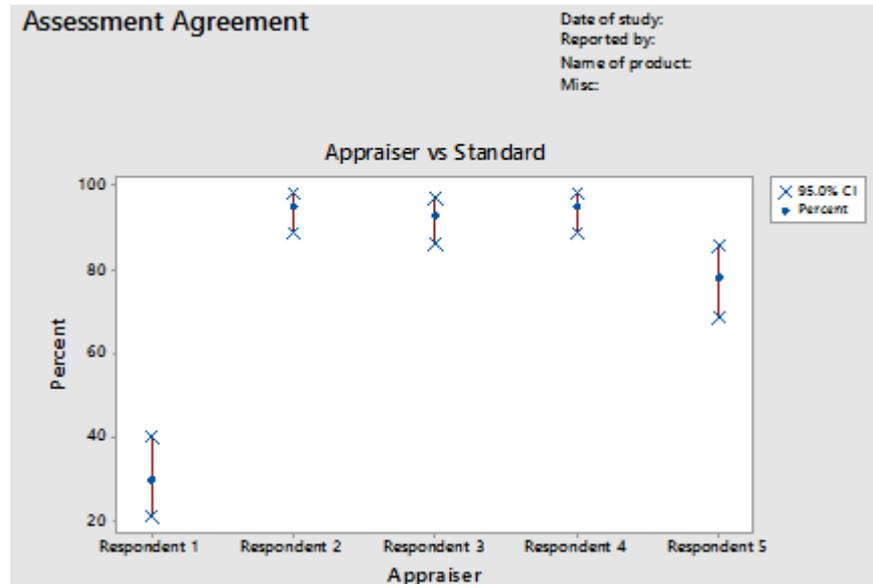


Attribute Agreement Analysis

- Is the agency name correctly entered?
- Not enough agreement between each appraiser and the standard
- Solutions: employ dropdown lists where possible to standardize entries

Fleiss' Kappa Statistics

Appraiser	Response	Kappa	SE Kappa	Z	P (vs > 0)
Respondent 1	No	-0.446879	0.1	-4.46879	1.0000
	Yes	-0.446879	0.1	-4.46879	1.0000
Respondent 2	No	0.639640	0.1	6.39640	0.0000
	Yes	0.639640	0.1	6.39640	0.0000
Respondent 3	No	0.627561	0.1	6.27561	0.0000
	Yes	0.627561	0.1	6.27561	0.0000
Respondent 4	No	0.678560	0.1	6.78560	0.0000
	Yes	0.678560	0.1	6.78560	0.0000
Respondent 5	No	0.220411	0.1	2.20411	0.0138
	Yes	0.220411	0.1	2.20411	0.0138



Project Metrics

Measure	Before	After	Difference
Process Steps	172	114	34%
Decisions	27	21	22%
Number of systems used to store customer information	4	2	50%
Number of customer data inconsistencies	57	0	100%
Number of days until miscellaneous property is completely inventoried	50	1	98%
Redirected work hours*	65	6	59

*Involves entering new customers into system, preparing for warehouse auctions, and searching for turn-in documents requested by agencies

Project Benefits - Intangible

- One system to work in on a daily basis
- Accurate inventory records
- Real-time inventory lists available online
- Intuitive online forms
- Availability of key data points to drive continuous improvement efforts

Improvement Summary

Current Key Issues



Multiple systems and ID formats to manage customer information



Lack of a comprehensive inventory system

How We Improved



1. Leveraged BI reports and system interfaces to reduce to two systems
2. Adopted OAKS customer number formats



Developed new turn-in process and online forms

As A Result

- Customers will have improved access to the State Surplus program (easier to use forms, online inventory, etc.)
- Surplus staff will be able to focus on more valuable and strategic efforts
- Data will now be available to inform continuous improvement efforts (e.g. processing times, workload)

Special *thanks* to...

- Erik Yassenoff, Sponsor
- Mary Sen, Fiscal SME
- Ken Henault, Fiscal Manager
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Questions/Comments

