

Leaning Forward in Detroit

Sponsored by:



Aimée Cowher
August 27, 2015

MBB Webcast Sponsor: MoreSteam.com

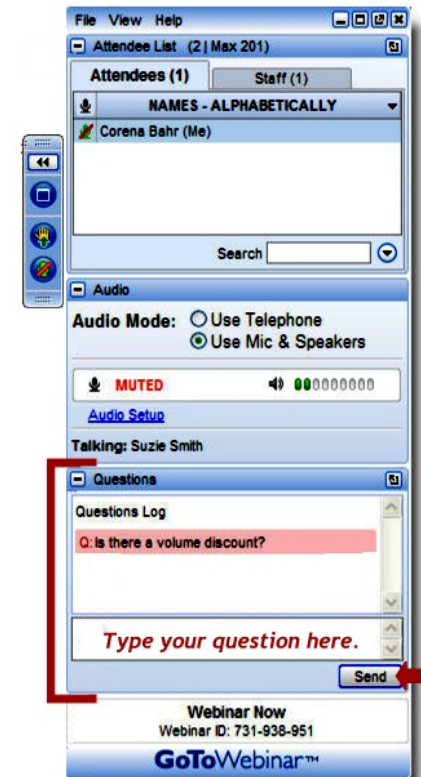
- Founded in 2000
- Trained 497,000+ Lean Six Sigma professionals
- Served over 2,000 corporate customers (including 50+% of the F500)
- First firm to offer the complete Black Belt curriculum online
- Courses reviewed and approved by ASQ and PMI
- Academic Partnerships with Ohio State University, Notre Dame, Cal Poly and George Washington University

Select Customers:



Today's Program

- Welcome
- Introduction of MBB Webcast Series
 - Ellen Milnes, MoreSteam.com
- Speaker:
 - Aimée Cowher, City of Detroit
- Open Discussion and Questions



About Our Presenter



Aimée Cowher

*Director – Lean Process Management,
City of Detroit*

- 20+ years of process improvement experience
- From Black Belt at AlliedSignal to CEO at Global Productivity Solutions
- BS in Mechanical Engineering from the University of Michigan and MS in Operations Management from Rensselaer Polytechnic Institute



Lean is a journey, not a destination...

Agenda

- » Project LEAN Launch & Lessons Learned
- » LEANing Forward
 - » Organizational Capability
 - » Technology and Tools
 - » Support Infrastructure
- » Project Example – EMS Response Time



LEAN Launch

- » Mayor Duggan asks the business community to engage
 - › <http://www.crainsdetroit.com/article/20140225/NEWS/140229913/duggan-to-business-community-help-stop-scrap-metal-theft-volunteer>
- » Invite project ideas from city employees
- » Evaluate, prioritize and assign projects to volunteers
- » Provide LEAN fundamentals training
- » Work 8-week projects and review recommendations
- » Project highlights and lessons learned





Business Volunteer Lean Projects

The projects led by our business volunteers were at various stages of completion. Some continued into Lean Green Belt projects led by the departments. (*Complete)

Department	Project Name	LEAN Forward?
BSEED	Code Enforcement	YES
	Business Licensing	NO
	Certificate of Occupancy	NO
	Site Plan Review	YES
HR	Hiring	Yes
	Onboarding	Yes
IT	Help Desk	NO
DDOT	Bus Pull-Ins	YES
	Bus Maintenance	YES

Department	Project Name	LEAN Forward?
DPW	Snow Removal	YES*
	Pot Holes	YES*
	Traffic Signs	YES
GSD	DPD Fleet Repair	YES
	Forestry	NO*
	Vacant Lots	YES
Procurement	Purchasing	NO
Finance	Income Tax	YES
PLA	Public Lighting	NO

CHANGE
IS  **70% of change efforts fail**
HARD



Change requires management and leadership...

Our organization needs more change leaders so we drafted some Champions!

Role of a Champion

- » Identify best resources
- » Align people to priorities
- » Define and prioritize projects
- » Conduct routine reviews
- » Remove barriers
- » Motivate and inspire
- » Celebrate success

Department Champions

- » GSD - Director & Fleet Manager
- » DPW - Director
- » BSEED Director
- » HR – Director, Deputy Director
- » DPD – Chief of Police
- » DFD - Executive Fire Commissioner
- » EMS – 2nd Deputy Commissioner and Chief
- » DDOT - Director
- » ITSD – Chief Information Officer
- » DWSD – Deputy Director
- » Mayor's Office - COO, Chief of Staff



Change requires focused resources...

We recruited the “best and brightest” from many city departments

Role of a Lean Green Belt Candidates

- » Undertake focused projects
- » Lead teams on waste elimination projects
- » Teach team members problem-solving tools
- » Apply LEAN tools as part of daily job
- » Think differently so they act differently

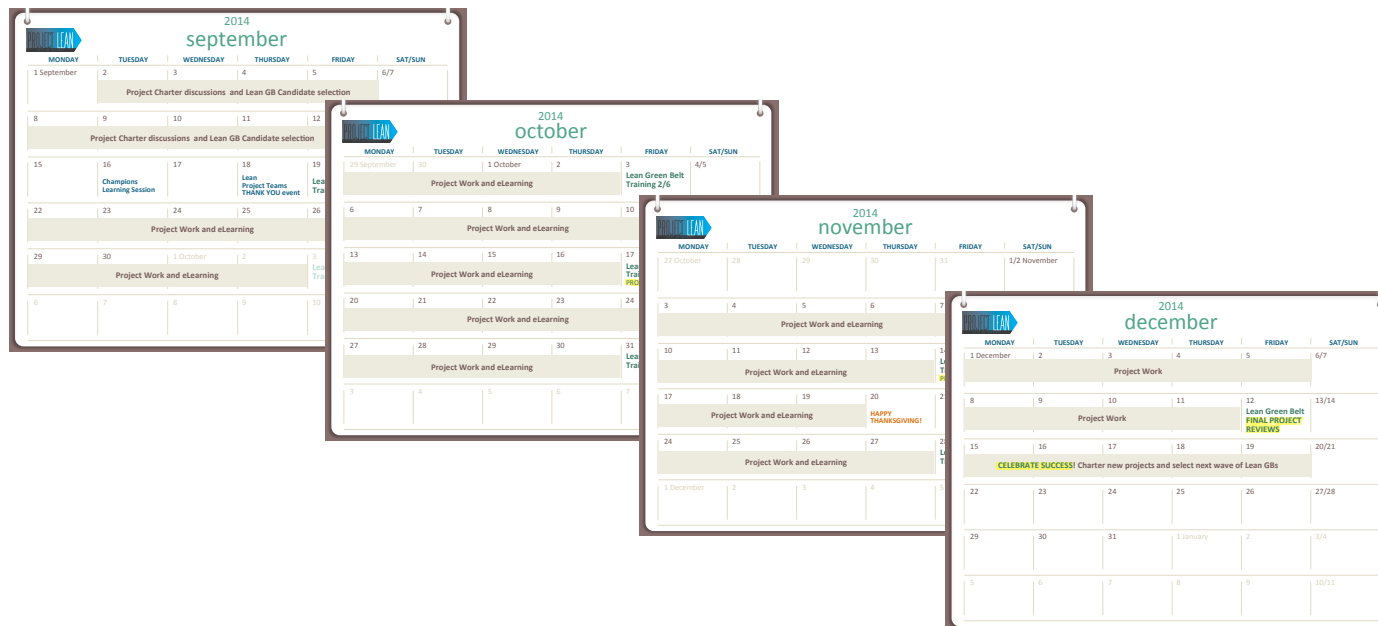
Department Lean Green Belt Candidates

- » GSD – 3
- » DPW - 2
- » BSEED - 1
- » HR - 4
- » DPD - 9
- » DFD - 6
- » EMS – 5
- » DDOT - 2
- » DWSD - 3
- » Finance (Income Tax) – 2
- » DAH, Law, PLD, Human Rights....
- » The LEAN Team – 4



Lean Green Belt Time Commitment

Activity	Time per week
eLearning	4-6 hours
Project Work	4 hours
Classroom training	8 hours (every other week)

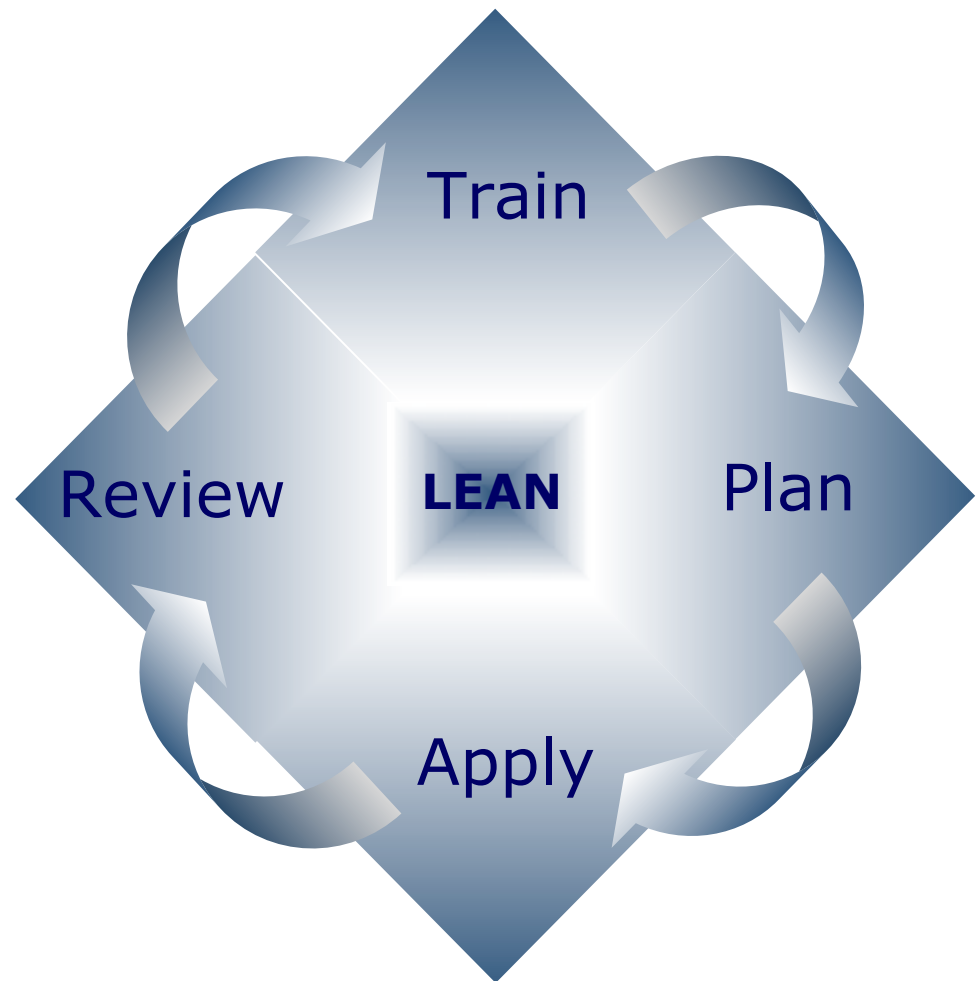


12-16 hours per week for 90 days!



Develop the SKILLS...

- » Training is accompanied by project work
- » The curriculum is delivered in logical “chunks” with an application period following each training session
- » Application support is provided to each project team
- » Projects are reviewed regularly





Technology and Tools

- » Project management, tracking and reporting is critical to success.
 - › Smartsheet.com
- » Green Belts need tools to facilitate data analysis
 - › EngineRoom is an all-purpose tool, with templates, charts, and statistical tests that guide you from project start to completion.
 - › Detailed tool tips and step-by-step wizards assist your data organization, analysis and interpretation.





Project Lean Index +										
			Project Wave	Status	Project Name	Target Completion Date	Actual Completion Date	Project Lead	Completed?	
23					DFD					
28			GB2	●	DFD Utility Cost Reduction	05/29/15		Norris Louie		
32			GB2	●	EMS MDC Utilization	05/29/15		Matt Fauls		
33			GB2	●	EMS Out-of-Service Time Reduction	05/29/15		Jason Bestard		
34			GB3	●	EMS Supervisor NVA Time	09/25/15		Ray Birch		
35			GB3	●	DFD Inventory Management	08/28/15		Julia DeRoo		
36			GB3	●	DFD Arson Investigation Process	09/25/15		Chuck Simms		
37			GB3	●	DFD/DFFA Injury Treatment Process	09/25/15		Rob Shinske		
38			GB4		Design Health & Wellness program	TBD		TBD		
39					DPD					
47			GB2	●	DPD 911 Call Intake Quality	05/29/15		James Fleming		
49			GB3	●	DPD - Uniforms Issuance Process	09/25/15		Donald Hollins		
50					DPW					
54			GB1	●	Snow Removal-2	12/19/14		Dhaval Patel		
55			GB3	●	DPW - Complaints Process	09/25/15		LaDiva Holman		
56					DWSD					
58			GB1	●	Running Water in Vacant/Abandoned Bldgs.	09/25/15		Palencia Mobley		
60			GB3	●	DWSD - Main Water Break Repair	09/25/15		Kieyona Jackson		
61					GSD					
68					FINANCE					
71			GB3	●	Income Tax-Compliance-Alex	09/25/15		Alexander Herman		
73					HR					
80			GB3	●	HR - Off boarding	09/25/15		LaQuita Evans		
81					ITS					
83			GB1	●	PC Upgrade	09/25/15		Amy Sovereign		

[illegible]



LEANing Forward – 2015

Department metrics and goals must align with top priorities and LEAN projects support the successful achievement of those goals

Priorities:

- » Create opportunities for Detroiters (ALL)
 - » Achieve national standards for public safety – crime and response times (DFD, DPD)
 - » Enhance the physical appearance of the City (BSEED, DPW, GSD)
 - » Make internal processes more effective and efficient (HR, IT, Purchasing)
 - » Improve delivery of external services (BSEED, DDOT, DWSD, DPW, GSD)
 - » Create new revenue sources (DLBA, BSEED, Income Tax, DAH)
-
- » Additionally, there is a unique opportunity to leverage support from the State of Michigan



The measures of success of our 2015 LEAN efforts

Measurement drives behavior!

- » LEAN projects chartered and supported in departments achieve stated improvement objectives on-time and contribute to departmental goals
- » Organizational capability has been developed to accomplish the above
 - › Develop an additional 30-45 LEAN Green Belts, 50-65 total by end of 2015
 - › Train 90-135 employees in LEAN Fundamentals to create a critical mass “thinking LEAN”, which is a prerequisite to “working LEAN”
- » Demonstrated collaboration with the state of Michigan, universities (EMU, MSU, UM, WMU, WSU) and local organizations (Michigan Lean Consortium, others TBD) and businesses (Quicken, Deloitte, others TBD)
 - › Joint projects (1-2)
 - › Internships (2-3)
 - › Resources utilized (2-4)



Project Example

EMS Response Time Reduction



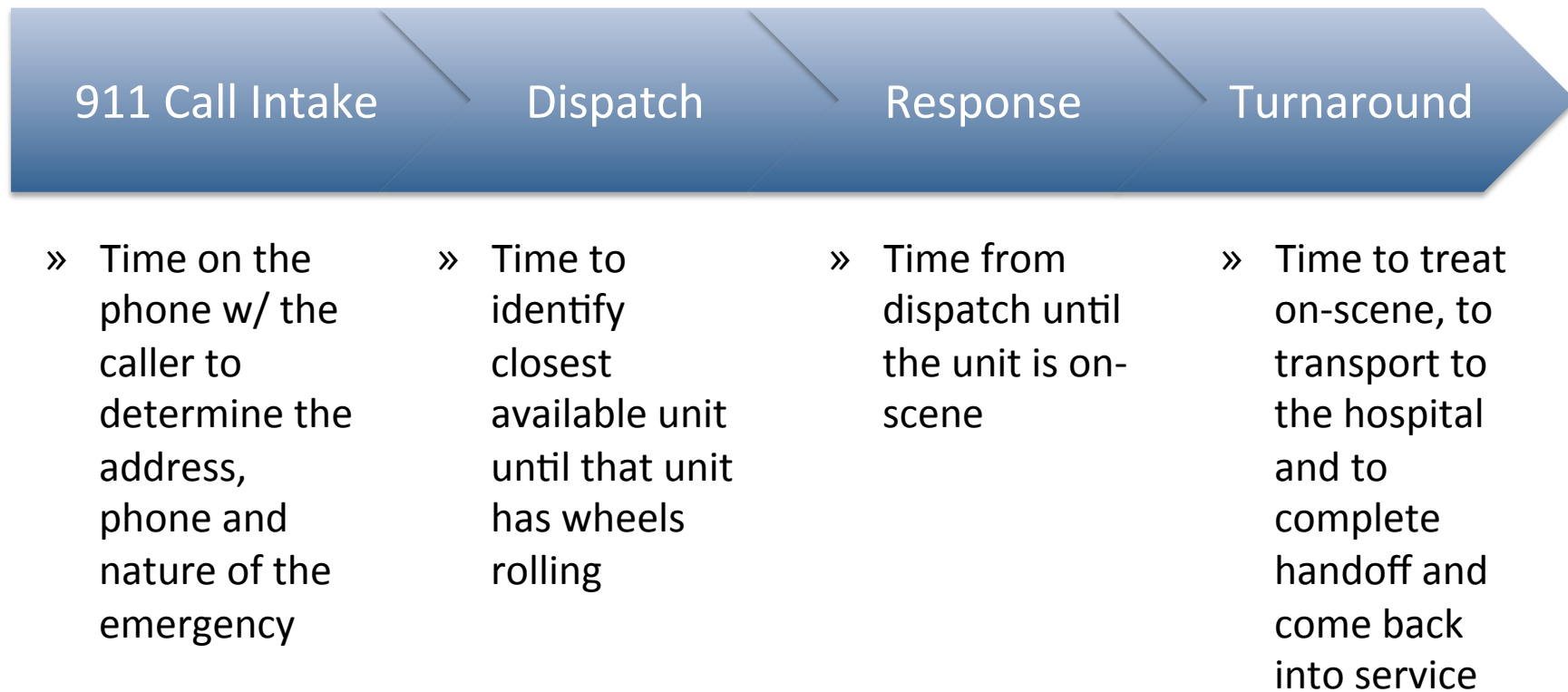
EMS response time reduction requires collaboration across several departments and functions

EMS Response Time

- » The Value Stream
- » The Projects
- » The Culture Change



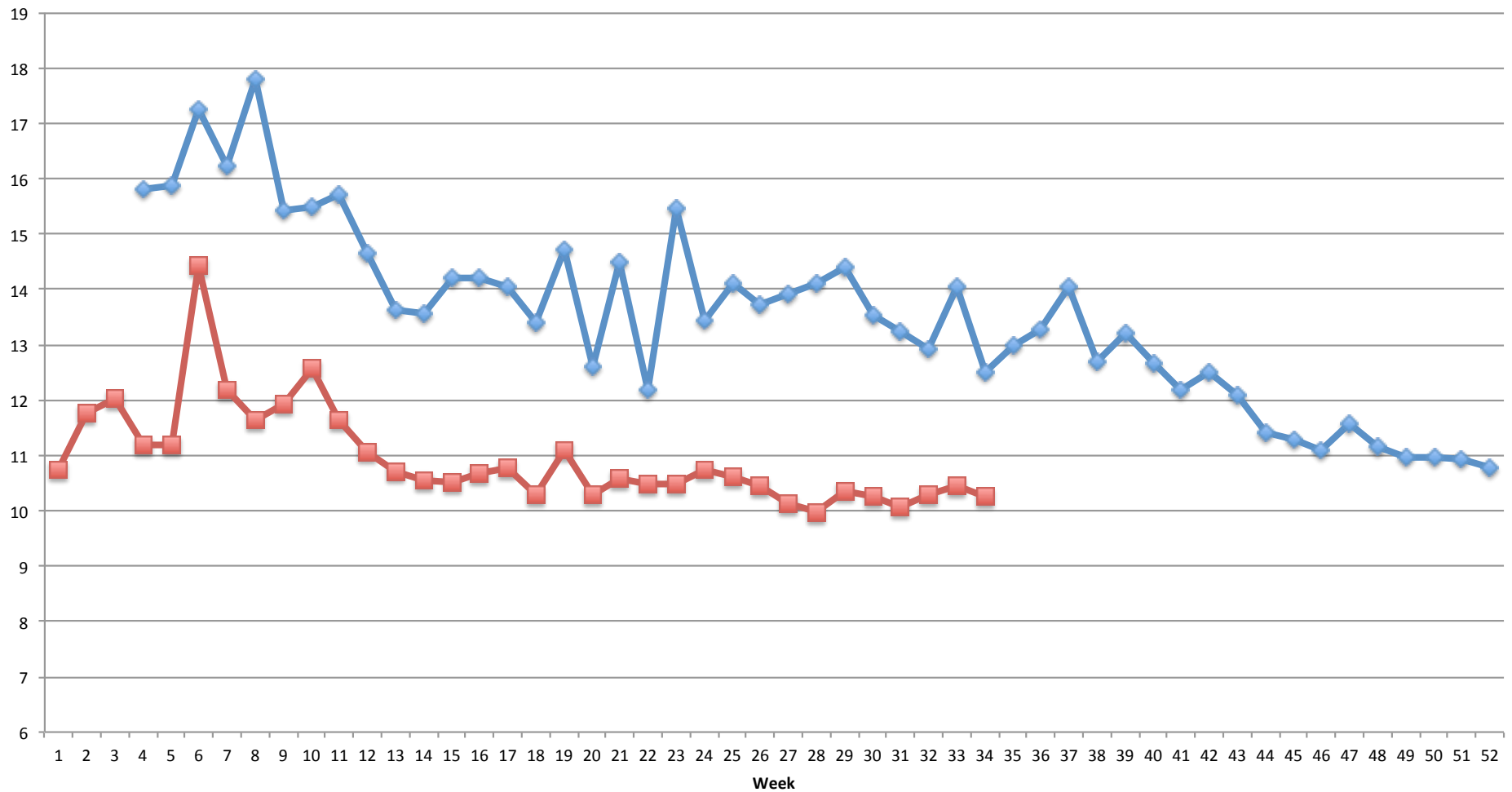
The Value Stream





Detroit EMS Response Time

2014 2015





HOW did we do it?





911 Call Intake

911 Call Intake

Dispatch

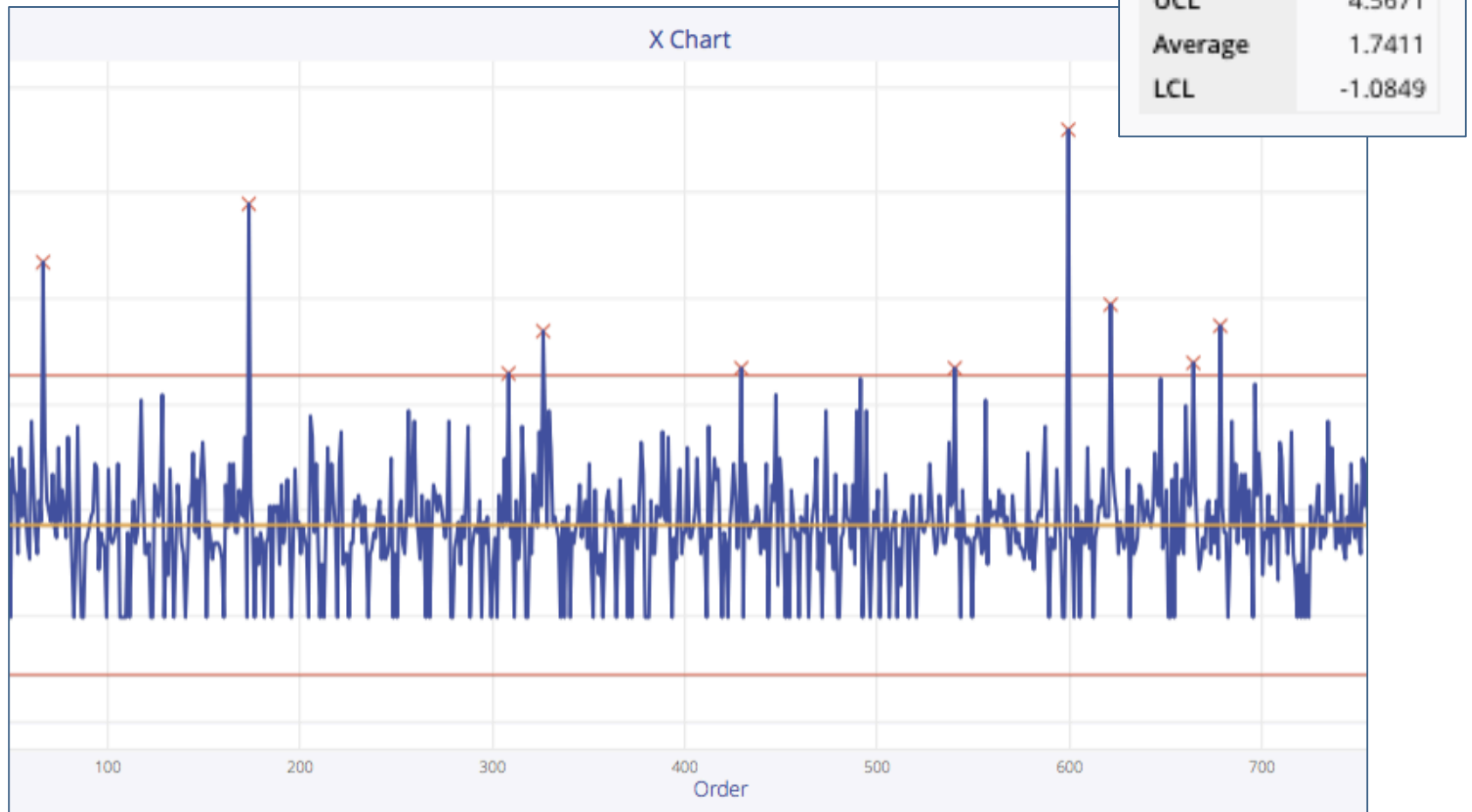
Response

Turnaround

- » People
 - › Director is a Green Belt
 - › Implemented [Standard Work](#) and Leader Standard Work to investigate call intake times longer than 2.5 minutes
- » Process
 - › Standardized and improved 911 Operator script to eliminate NVA steps
- » Systems / Technology
 - › ProQA
 - › QA / QI embedded in implementation of new system



Call Intake Delay 01-08aug15





Dispatch

911 Call Intake

Dispatch

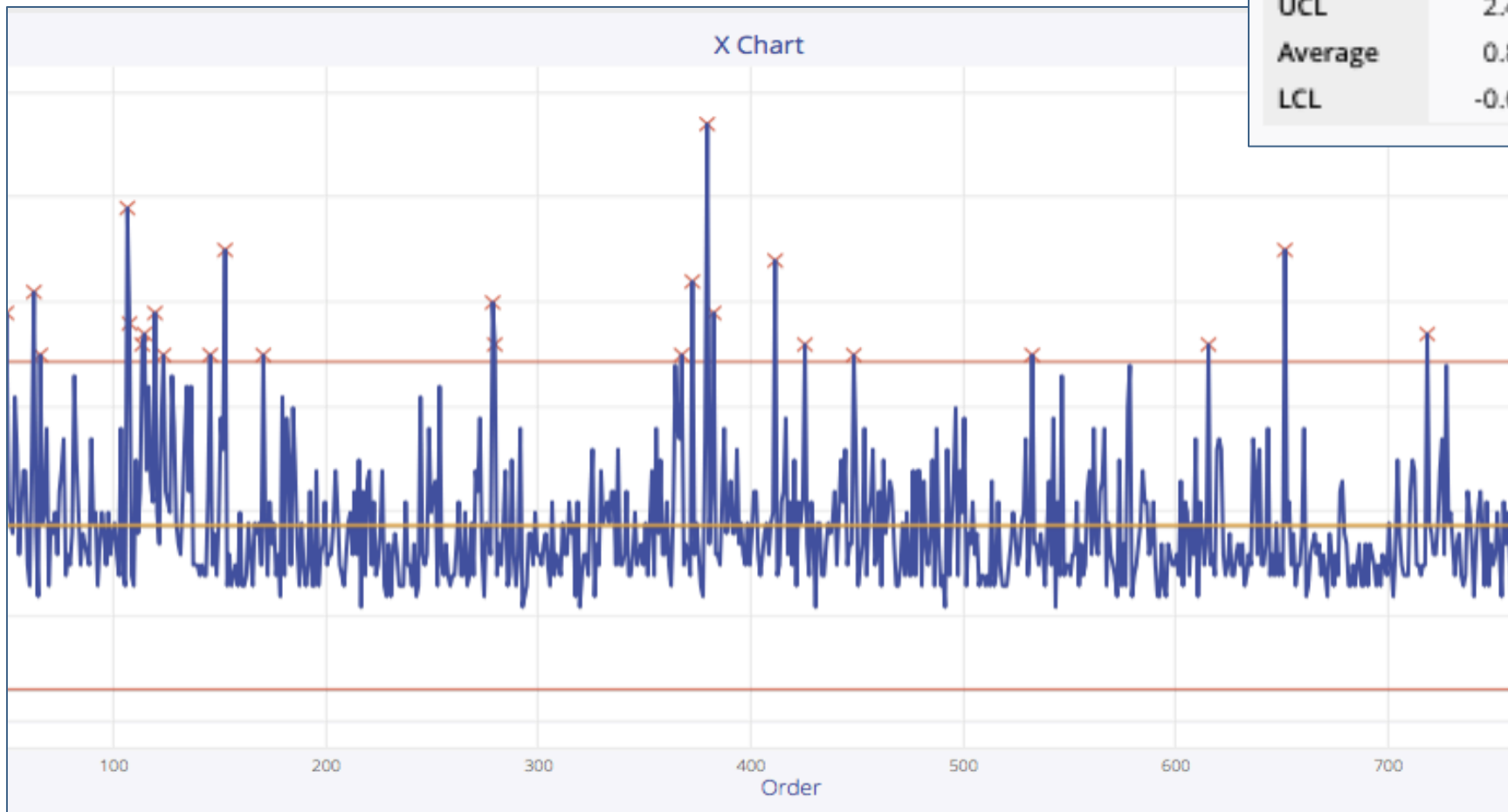
Response

Turnaround

- » People
 - › Chief is a Green Belt
 - › Implemented [standard work](#) and leader standard work to investigate runs that take longer than 1 minute to dispatch
- » Process
 - › Updated SOP to improve the balance of work across all units
 - › Implemented weekly daily / measures for Unit utilization
- » Systems – Hardware & Technology
 - › New headsets, monitors and chairs
 - › Implemented [GPSgate vehicle](#) tracker technology to quickly locate closest available unit



Dispatch Delay 01-08aug15



X Chart Statistics

	Overall
UCL	2.4375
Average	0.8764
LCL	-0.6847



Response & Turnaround

911 Call Intake

Dispatch

Response

Turnaround

- » People
 - › 2nd Deputy Commissioner, Asst. Chief, Union President, and 3 Medics are Green Belts!
 - › Reduced NVA time for supervision to provide better support to field operations
- » Process
 - › MDC utilization
 - › Reduce Out-of-Service time
 - › Improve supply chain process to reduce OOS time
- » Systems – Technology, Hardware and Assets
 - › Installed mobile data computers (MDCs) on all units to improve (time) measurement system accuracy
 - › Provided wireless keyboards to reduce hospital turn-around time
 - › 10 new ambulances, 4 Rapid Response vehicles, supplemental private units



How will we sustain? What's the next breakthrough?

- » Disciplined commitment to a rigorous control plan
- » Partnership with United Rescue to implement a volunteer network of community based first responders

Questions

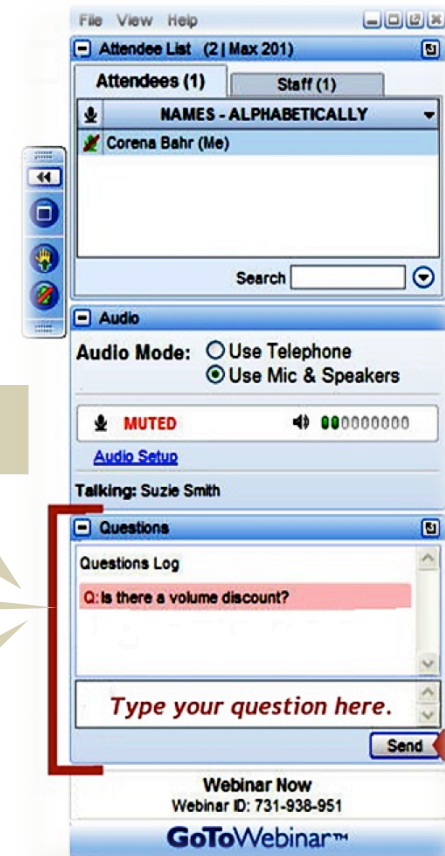


Aimée Cowher

How have you handled

Have you ever encountered

Would you explain more how you've approached



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- [Free resources](#), e.g. tutorials, articles, on-demand webcasts



Thank you for joining us

Questions? Comments about today's program?



Aimée Cowher, City of Detroit
cowhera@detroitmi.gov

Ellen Milnes, MoreSteam.com
emilnes@moresteam.com

Join us next month:

*Wed., September 23rd – George Rofail, KeyBank Enterprise
LSS Master Black Belt*

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