



Lo

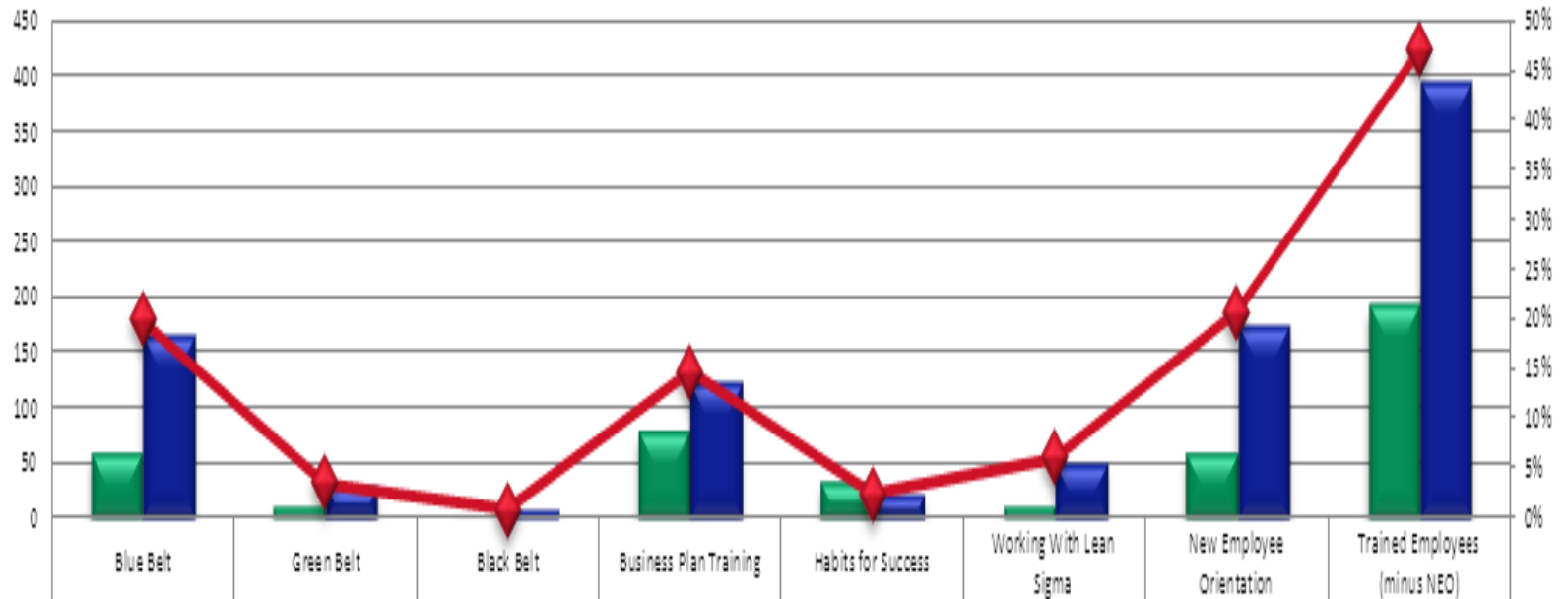





Lean Sigma

TYLER

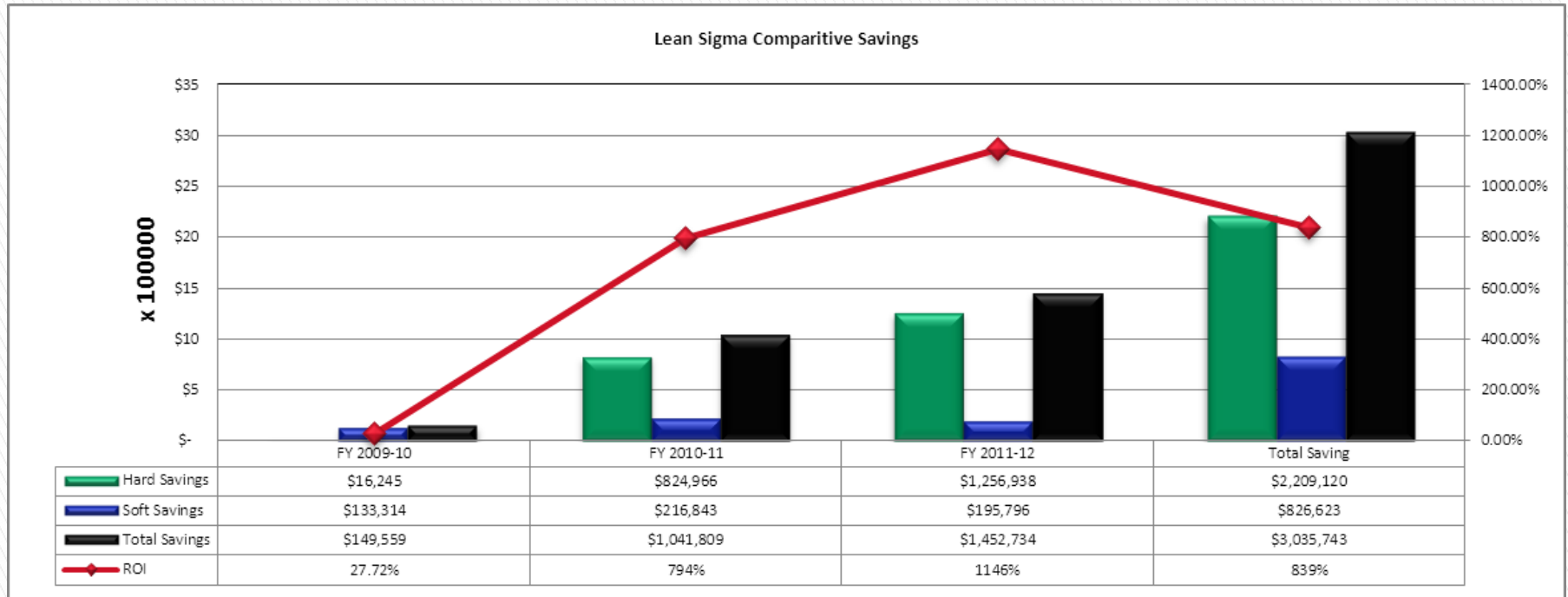


Lean Sigma Total Employees Trained




 FY Total	59	10	3	77	32	10	58	191
 Total	167	29	7	124	20	50	174	397
 % Trained	20%	3%	1%	15%	2%	6%	21%	47%

Lean Sigma Program



Improve Online Report Process





TYLER POLICE DEPARTMENT

LOYALTY ★ COURAGE ★ INTEGRITY

711 W. Ferguson, Tyler TX 75702
903-531-1090 | CALL 9-1-1 in Emergency

HOME ABOUT US DIVISIONS RECRUITING COMMUNITY CRIME INFORMATION **FORMS** LINKS

FORMS

Download Forms

- Burglar Alarm Permit Application
- Crime Victims Information (English)
- Crime Victims Information (Spanish)
- Forgery Reporting Form
- Parade Permit Application
- Personal History Form
- Property Release Form
- Temporary Street Closure

► **Online Forms**

- [Citizen Incident Report](#)
- Citizen Police Academy Application
- Public Information (Open Records Request) Form
- Texans Against Crime Registration Form

CITIZEN INCIDENT REQUEST FORM

This form is for reporting Non-Criminal incidents to the Tyler Police Department. Non-Criminal incidents include lost watch, lost wallet, lost cell phone, or missing City of Tyler Solid Waste trash cans, etc. All Criminal Offenses must be reported through the Communications Unit of the Tyler Police Department.

This is not a secure site. Please do not include credit card numbers or financial account numbers. This information will be obtained from you at a later date.

"I understand that making a false report to a police agency is a Class B Misdemeanor, punishable by up to 180 days in the County Jail and/or a fine not to exceed \$2,000." (Texas Penal Code Section 37.08)

Citizen's Incident Report Online Form

First Name*	Middle Initial	Last Name*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Address 1*	Address 2	City*
<input type="text"/>	<input type="text"/>	<input type="text"/>
State*	Zip Code*	Today's Date*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Home Phone*	E-Mail Address	Date of Offense*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Work Phone Number	DLID Number and State*	Date of Birth*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Location of Offense (must be within Tyler City Limits)*		
<input type="text"/>		
Property/Vehicle Description (serial number, model, make etc.)*Insurance Company or Business Requiring Report		
<input type="text"/>		
Complete detailed Narrative/Description of incident*		
<input type="text"/>		

Project Start: 06 /13/2012
Project Revision: 09 /10/ 2012
Project Champion: Diannia Jackson
Black/Green Belt: David L. Long

Define Phase

1. Select Output Characteristics



Attribute Capability

Confidence --> **0.95**
 Units --> **280**
 Opportunities --> **1**
 TOP's --> **280**
 Defects --> **106**

Sample data is:

- Short Term
- Long Term

Confidence Interval is:

- One-sided
- Two-sided

Short Term Capability

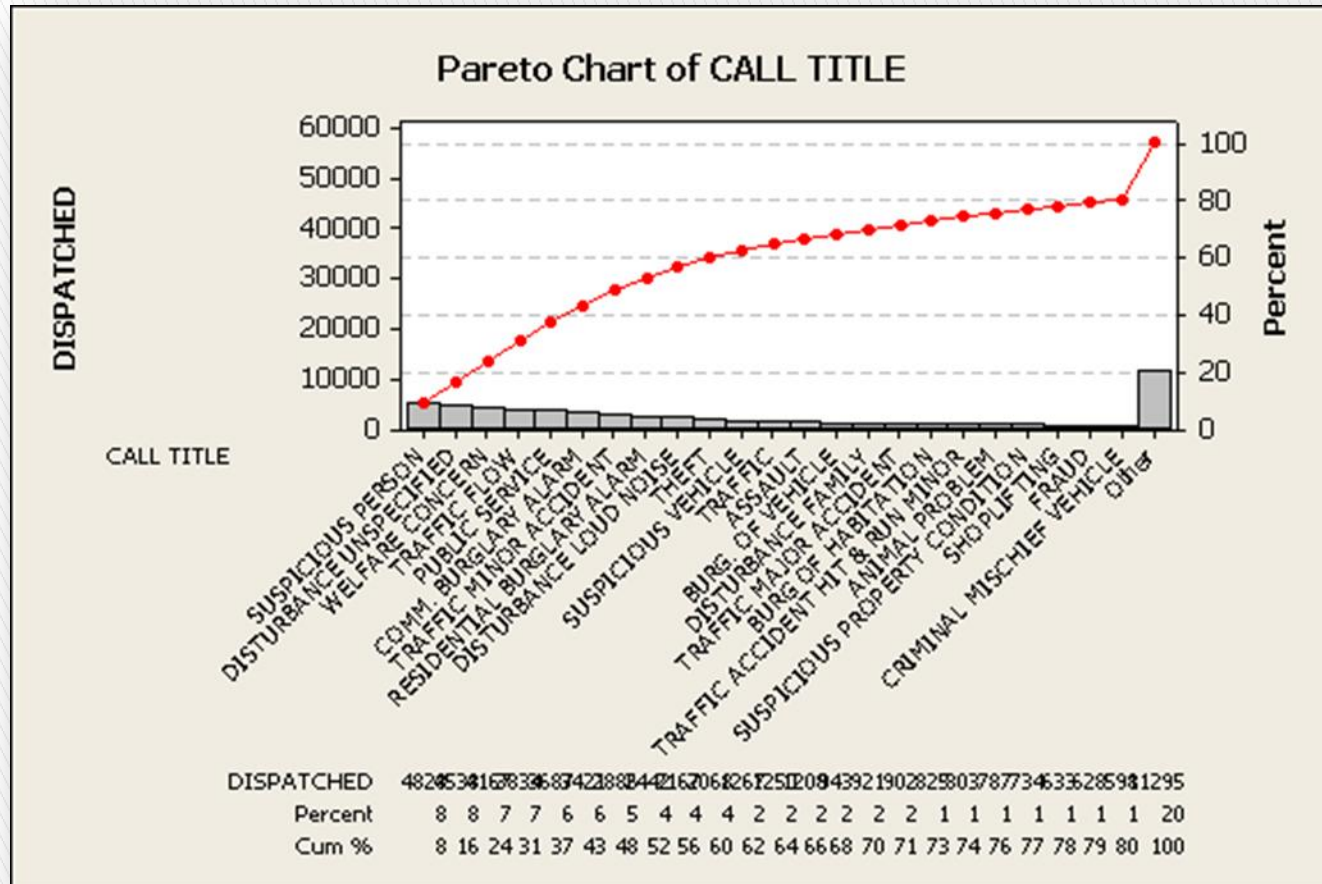
	p(d)	Percent	ppm	Cpk	Z		Defects	
Upper Limit on Failure Rate	0.4382	43.8%	438,214	0.05	0.16	<= "worst case" =>	123	95%
Nominal Value	0.3786	37.9%	378,571	0.10	0.31	<= "best estimate"	↑ ↓	Confidence
Lower Limit on Failure Rate	0.3215	32.2%	321,529	0.15	0.46	<= "best case"=>		90

Estimated Long Term Capability (shifted by 1.5 sigma)

	p(d)	Percent	ppm	Ppk	Z
Nominal Value	0.8831	88.3%	883,127	-0.40	-1.19

Define Phase

1. Select Output Characteristics



Define Phase

2. Define Performance Standards



Project Charter

Project Authorization

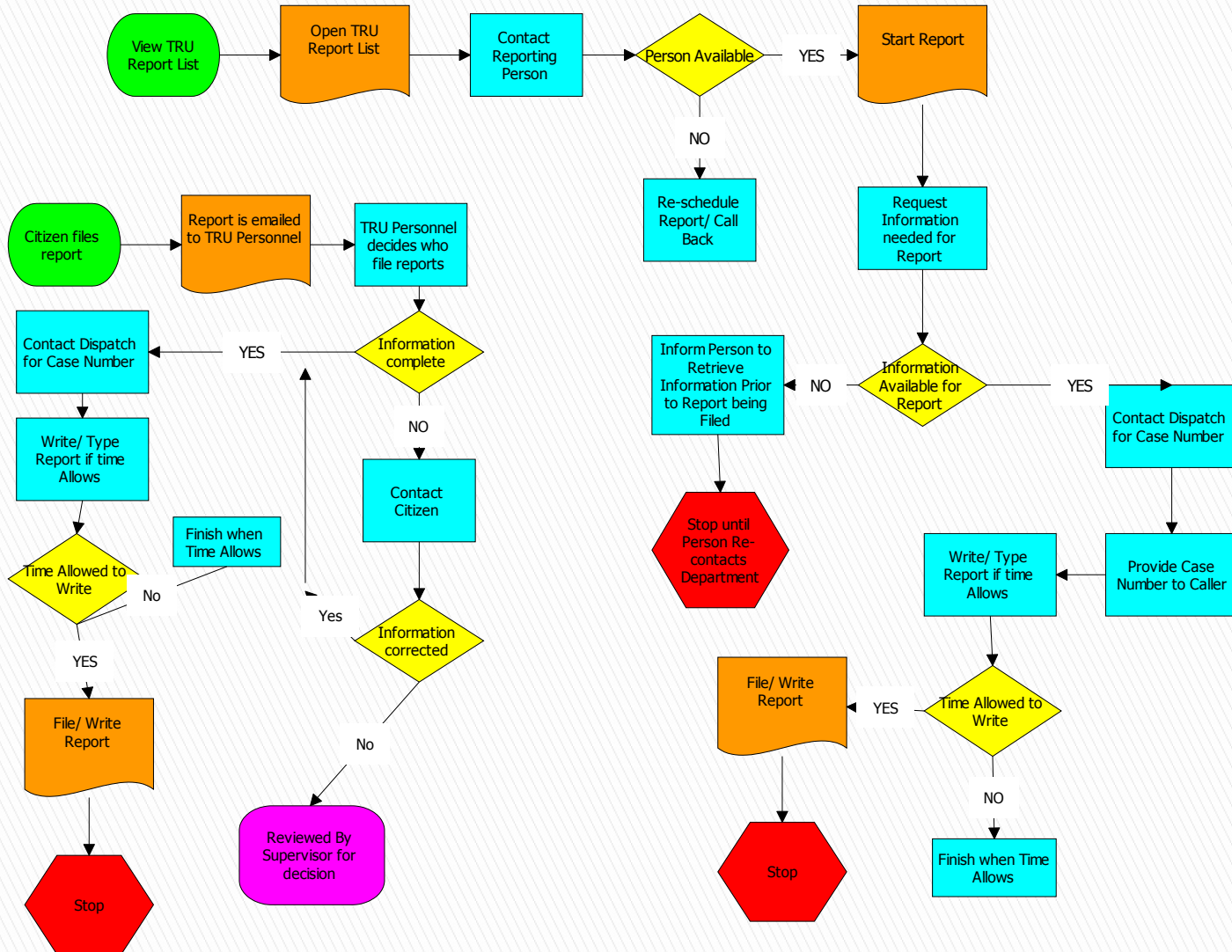
Organization:	Champion:	Process Owner:
Tyler Police Department	Diannia Jackson	Gary M. Swindle
Project:	Project #:	
Improve Online Police Reporting	3	
Problem Statement:		
The Tyler Police Department is experiencing a problem with: citizen reporting. The area where the problem is occurring is: the patrol division / TRU Reporting. The problem has existed for at least: 2 years. The magnitude of the problem is: Citizen Reporting is operating below expectations. The current performance: average number of citizens reports is (14.5 Calls per Month), and the expected performance is: maintain an average number of citizen reports should be increased (from 0.31% to .62% (100%) of calls taken online). The effect this problem is having on our business is: increased calls for service for non-priority calls. This is costing us as much as: \$29.00 per call on average.		
Project Objective:		
Make online police reporting more available to citizens and reduce the amount of written reports by Public Service Officers/ Police Officers.		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
.31%	.62% (100%)	\$5,086
Approval Date:	Champion Signature:	Process Owner Signature:
6/13/2012	Diannia Jackson	Gary W. Swindle
Estimated Completion Date:	Project Leader:	Financial Analyst:
12/31/2012	David L. Long	Jim Yanker

The problem statement identifies the purpose of the project.

The project objective identifies a goal of a 100% increase in online reports.

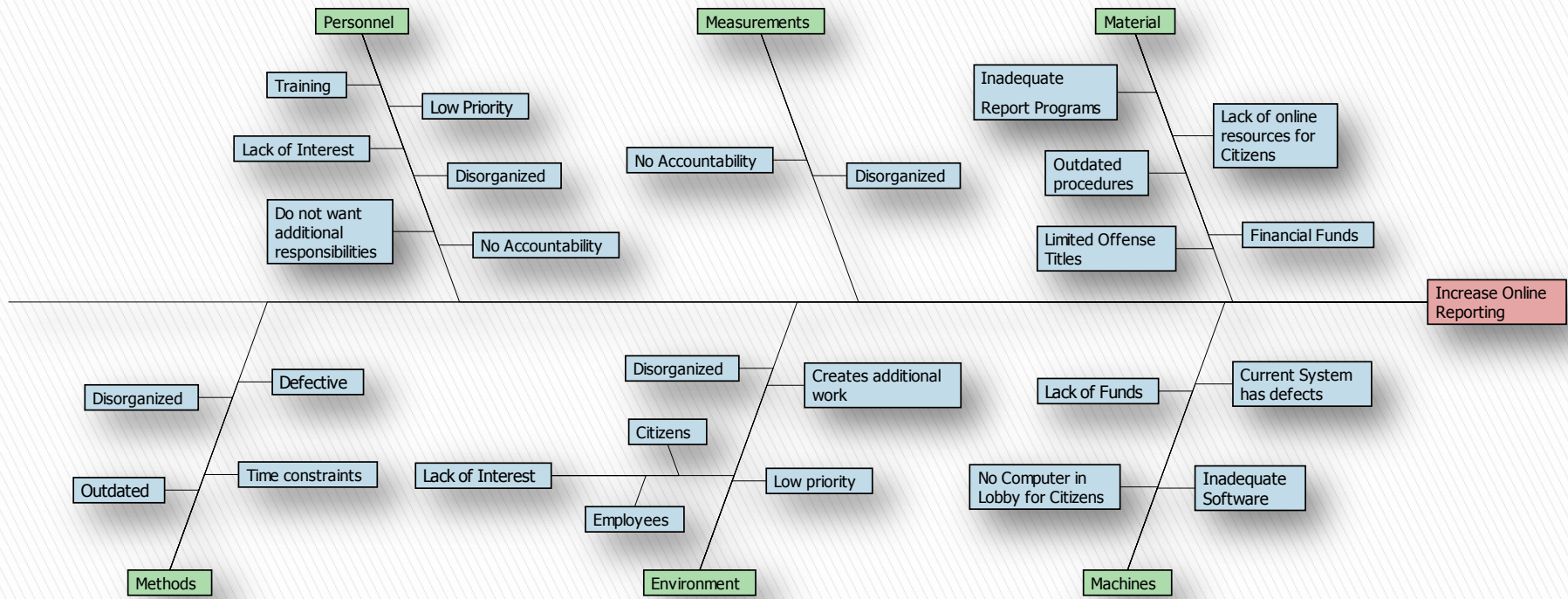
Measure Phase

6. Identify Variation Sources



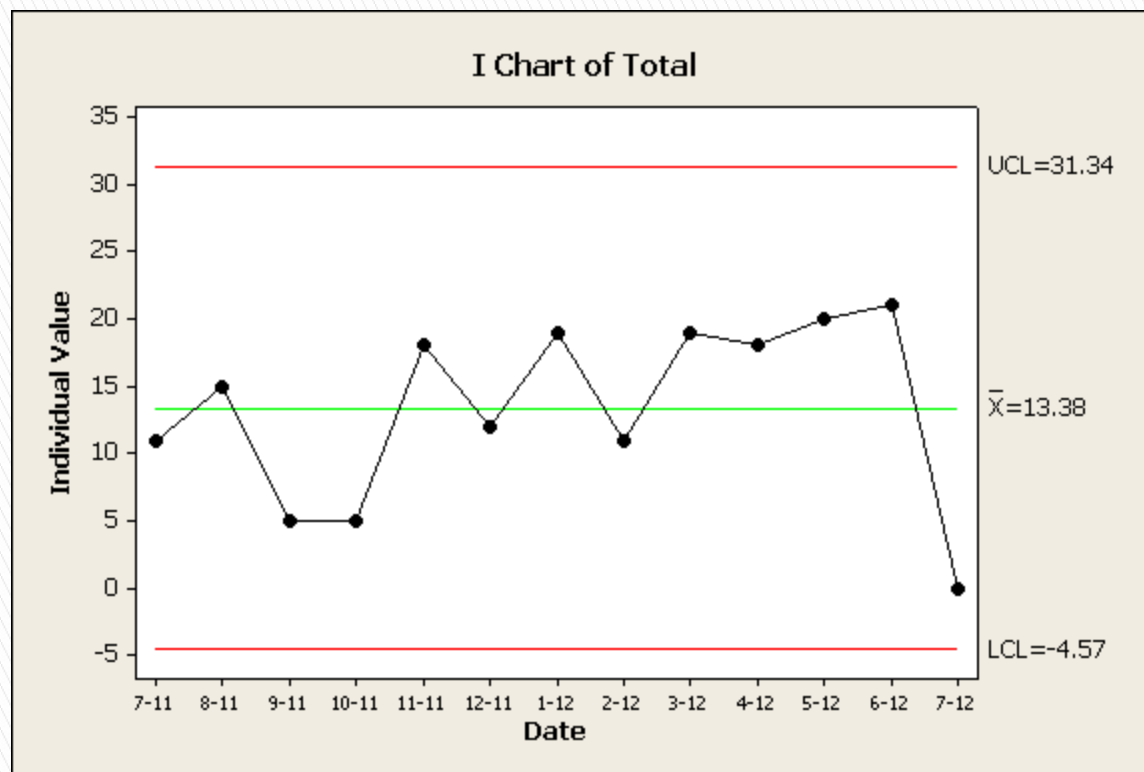
Measure Phase

6. Identify Variation Sources



Measure Phase

6. Identify Variation Sources



Measure Phase

6. Identify Variation Sources



YX Diagram Summary

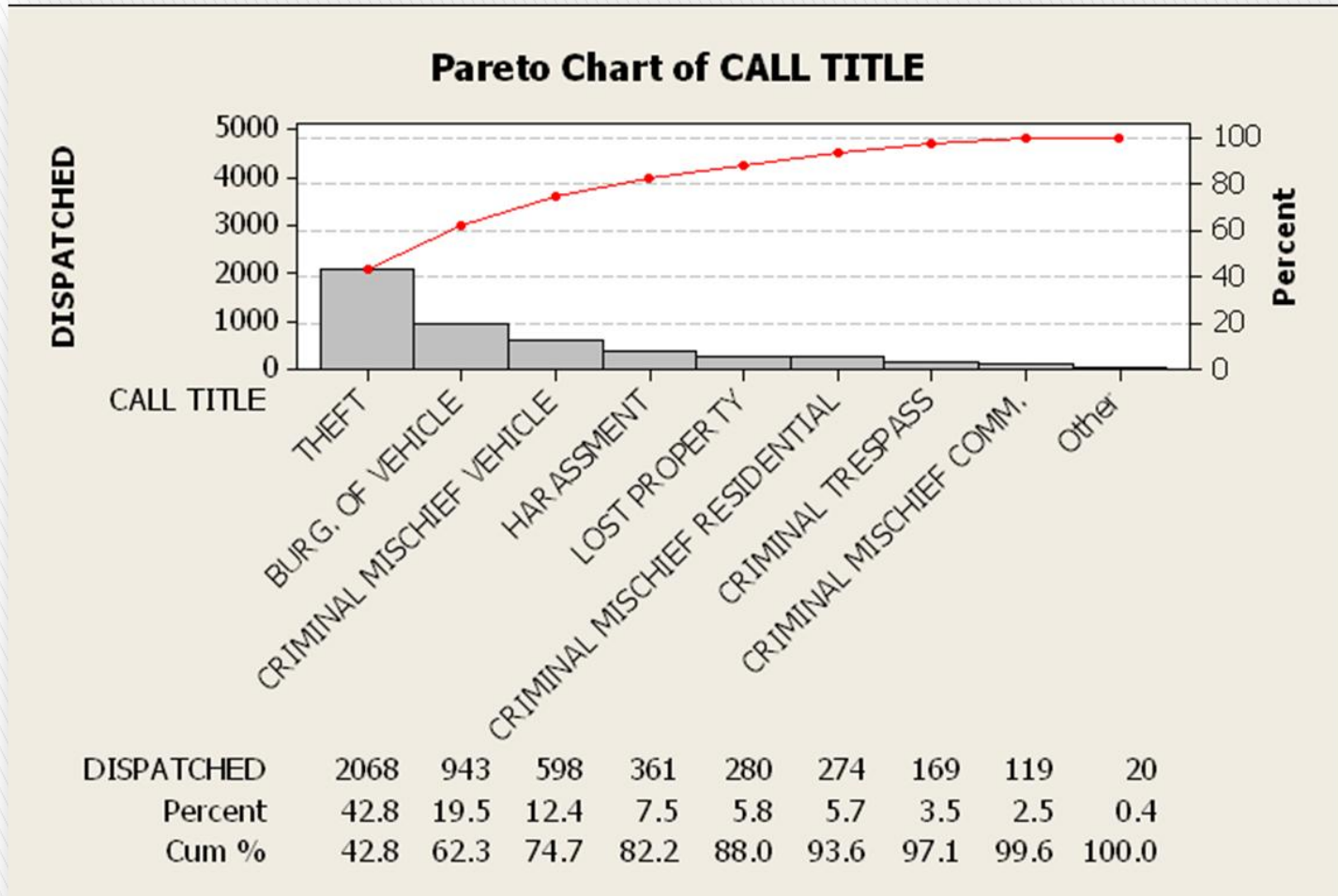
Process:	Increase Online Reporting
Date:	6/13/2012

Output Variables	
Description	Weight
Increase Online Reporting	9

Input Variables	
Description	Ranking
Inadequate report programs	81
Inadequate software	81
Current System will not integrate increased online reports	81
Limited Offense Titles	81
Disorganized	63
No Accountability	63
Current system has defects	63
Inadequate personnel	63
Lack of online resources for citizens	54
Outdated polices	45
Low priority	45
Lack of interest	45
Citizen disinterest	45
Personnel do not want additional responsibilities	45
No computer for citizens	27
Waste of time if online report is inadequate information	27
Lack of training	9
Outdated procedures	9

Analyze Phase

7. Screen Potential Causes



Potential Online Reports

Analyze Phase

7. Screen Potential Causes



CITIZEN INCIDENT REQUEST FORM

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"I understand that making a false report to a police agency is a Class B Misdemeanor, punishable by up to 180 days in the County Jail and/or a fine not to exceed \$2,000." (Texas Penal Code Section 37.08)

Citizen's Incident Report Online Form

First Name* <input type="text"/>	Middle Initial <input type="text"/>	Last Name* <input type="text"/>
Address 1* <input type="text"/>	Address 2 <input type="text"/>	City* <input type="text"/>
State* Alabama ▾	Zip Code* <input type="text"/>	Today's Date* <input type="text"/>
Home Phone* <input type="text"/>	E-Mail Address <input type="text"/>	Date of Offense* <input type="text"/>
Work Phone Number <input type="text"/>	DL/ID Number and State* <input type="text"/>	Date of Birth* <input type="text"/>
Location of Offense (must be within Tyler City Limits)* <input type="text"/>		
Property/Vehicle Description (serial number, model, make etc.)*		Insurance Company or Business Requiring Report
<input type="text"/>		<input type="text"/>
Complete detailed Narrative/Description of incident* <input type="text"/>		

[Submit](#)

Current Online Report Format

Improve Phase

8. Determine Optimal Solution



English | [Español](#) | [Français](#) | [中文](#)

Welcome to the Coplogic Citizens Online Police Reporting System. **If this is an Emergency** report system allows you to submit a report immediately and print a copy of the police report. The online citizen police report filing is right for you:

- This is not an Emergency?
- This incident occurred within the Coplogic City limits?
- There are No Known suspects?
- This did not occur on a State Freeway?

If you answered yes to all of the above questions, you are ready to file your report on the software before filing the report. If you answered no to any of the questions please see the [Questions](#) section.

Upon completion of this report process you will:

- See the words: "Your online police report has been submitted" showing that
- Be given a police report case number.
- Be able to print a copy of the police report to keep for your records.

Please Note:

- All cases filed using the Citizens Online Police Reporting System will be reviewed.
- Upon review, if further investigation of your case is needed, you may be contacted.
- **Filing a false police report is a crime.**

Using the Coplogic Police Online Citizen Reporting System you can report the following:

- [Lost Property](#) [Identity Theft](#) [Theft](#)
[Vehicle Burglary](#) [Harassing Phone Call](#) [Vandalism](#)




Theft: **Start** > Yourself > Incident > Property > Review > Finish

Theft	
Definition	Your property is taken without your permission.
Examples	Property known to be stolen and missing may be reported. Lost property is not a theft.
Confirm Question(s)	
Do you have any suspect information regarding this incident?	
<input type="radio"/> Yes <input type="radio"/> No	
<<<< Back Continue >	



Theft: **Start** > Yourself > Incident > Property > Review > Finish

 1. Sorry, reports with suspect information cannot be filed online. Please contact us directly to have an officer or deputy respond to your location.	
Theft	
Definition	Your property is taken without your permission.
Examples	Property known to be stolen and missing may be reported. Lost property is not a theft.
Confirm Question(s)	
Do you have any suspect information regarding this incident?	
<input checked="" type="radio"/> Yes <input type="radio"/> No	
<<<< Back Continue >	

Improve Phase

8. Determine Optimal Solution



Potential Improvement Costs

Coplogic, Inc.
 231 Market Place, Suite 520
 San Ramon, Ca. 94583
 (800)734-9293
dbergenholtz@coplogic.com
www.Coplogic.com



July 9, 2012

To: Lt. David Long
 Tyler Police Department
 711 W. Ferguson Street
 Tyler, Texas 75702

Quote No.: 12-01PembrokePines,FL
 Ship to (if different address):

Salesperson	Your P.O. No.	Date Shipped	Shipped Via	F.O.B. Point	Terms
D. Bergenholtz					

Quantity	Description	Unit Price	Amount
1	<u>Set-Up for DeskOfficer Online Reporting System (DORS)</u> <ul style="list-style-type: none"> Implementation Assistance Setting up the interface to RMS/Report Writing Software Training 	12,500.00	12,500.00
1	<u>Annual DORS Usage, Support, and Maintenance</u> <ul style="list-style-type: none"> Unlimited users, incident types, and report intake Unlimited customer support (phone and e-mail) Every update and upgrade released for DORS Hosting on Coplogic's Secure Servers 	10,000.00	10,000.00
Subtotal			22,500.00
Sales Tax			0.00
Shipping & Handling			0.00
Total Due			\$ 22,500.00

Improve Phase

9. Implement Improvements



Incident Type	Definition	Example
Lost Property	When Property is missing or lost	Property that is missing, i.e. left at a restaurant, at the mall, or missing from home, etc...
Theft	Your property is taken without your permission. Value of property is less than \$1500. <i>(If property being reported as stolen is a firearm, you must contact the Tyler police Department.)</i>	Property known to be stolen. <u>(There are no known Suspects.)</u>
Open Garage Theft/ Shed (Detached or attached)	Property stolen from your detached or attached garage or shed when the door was left open or unlocked <i>(no forced entry)</i>	Lawn Mowers, golf equipment, or tools, etc.. <u>(There are no known suspects.)</u>
Vandalism (Criminal Mischief)	The act of changing, modifying or defacing public or private property. The damage of the property is less than \$1500. <i>(Crimes committed due to bias against a particular race or group, or if the property damaged is a place of worship, public utilities, or cemetery, you must contact the Tyler Police Department.)</i>	Knocking over mail boxes, keying your vehicle, vehicle being egged, etc... <u>(There are no known suspects.)</u>
Vehicle Burglary	Property stolen from a motor vehicle. <i>(If you want your vehicle processed for physical evidence or there is traceable evidence left at the scene, you must call the Tyler Police Department to report this incident.)</i>	Car stereo-radio, personal property stolen, i.e. purse, phone, CDs, etc... <u>(There are no known suspects.)</u>
Harassing Phone Calls	Numerous unwanted phone calls of an annoying, harassing or threatening in nature. The District Attorney's Office requires multiple calls, and/or a threat of violence, and recorded dates and times of the call. <i>(If the caller is known, you must call the Tyler Police Department to report this incident)</i>	Someone makes numerous calls within a short period of time and immediately hangs up, makes specific threats of violence or uses lewd obscene language in an attempt to cause alarm.

If your incident does not meet the above criteria, you can not file your report online, and you must contact the Tyler Police Department to report the incident.

Improve Phase

9. Implement Improvements



Tyler Police Department On-Line Crime Reporting Form

The Tyler Police Department is providing this form for victims of certain offense to easily file a report. This form is designed to afford you the opportunity to report these offenses at your convenience. A list of the offenses and a brief description of them are listed below. To access the proper reporting form click on the appropriate form name. By using this method to report your offense the Tyler Police Department will not be sending an Officer to your location. After you submit the report it will be reviewed by a supervisor. At a later date you will be provided a case number. If you need to contact the Tyler Police Department in the future concerning your report please refer to the case number.

If this is an emergency please dial 911 immediately.

If you need a Police Officer dispatched to your location, please call the Communications Center at 903-531-1000.

IF YOUR INCIDENT DOES NOT MEET THE BELOW CRITERIA, YOU CAN NOT FILE YOUR REPORT ONLINE, AND YOU MUST CONTACT THE TYLER POLICE DEPARTMENT TO REPORT THE INCIDENT.

Lost Property - When Property is missing or lost. (Property that is missing, i.e. left at a restaurant, at the mall, or missing from home, missing trash can, etc.)

Theft - Your property is taken without your permission. Value of property is less than \$1,500.00. If property being reported stolen is a firearm, you must contact the Tyler Police Department. (Property known to be stolen and there are no known suspects.)

Open Garage Theft/Shed (Detached or attached) - Property stolen from your detached or attached garage or shed when the door was left open or unlocked and there is no forced entry. (Lawn mowers, golf equipment, or tools etc. and there are no known suspects.)

Vandalism (Criminal Mischief) - The act of changing, modifying or defacing public or private property. The damage of the property is less than \$1,500.00. Crimes committed due to bias against a particular race or group, or if the property damaged is a place of worship, public utilities, or crematory, you must contact the Tyler Police Department. (Knocking over mail boxes, keying your vehicle, vehicle being egged, etc and there are no known suspects.)

Improvements...

Each type of report will have its own link to a reporting form.

Open Garage Theft/Shed (Detached or attached) - Property stolen from your detached or attached garage or shed when the door was left open or unlocked and there is no forced entry. (Lawn mowers, golf equipment, or tools etc. and there are no known suspects.)

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Vehicle Burglary - Property stolen from a motor vehicle. If you want your vehicle processed for physical evidence or there is traceable evidence left at the scene, you must contact the Tyler Police Department. (Car stereo-radio, personal property stolen, i.e. purse, phone, CDs etc... and there are no known suspects.)

Harassing Phone Calls - Numerous unwanted phone calls of an annoying, harassing or threatening in nature. The Smith County District Attorney's Office requires multiple calls, and/or a threat of violence, and recorded dates and times of the call. If the caller is known, you must call the Tyler Police Department to report this incident. (Someone makes numerous calls within a short period of time and immediately hangs up, makes specific threats of violence or uses lewd obscene language in an attempt to cause alarm.)

Improve Phase

9. Implement Improvements



LOST PROPERTY REPORT

You must complete all required fields. If the suspect in your case is known you must contact the Tyler Police Department and can not use this form to report your incident.

Please use the Manage Form Option to Develop your Form

Name of person making report (victim) - Last Name, First Name MI *

Victim's address *

Victim's date of birth (MM/DD/YYYY) *

Victim's Sex *
Female

Victim's Race *
Asian/Pacific Islander

Victim's Phone Number (include area code) *

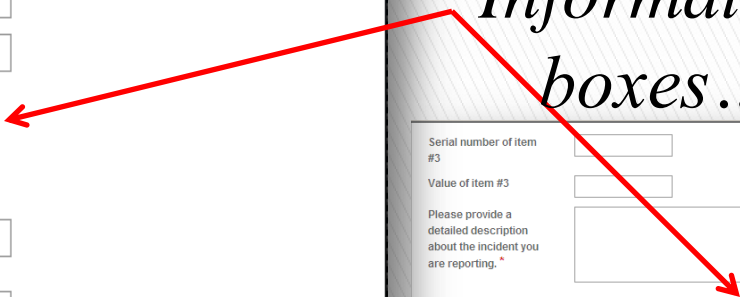
Victim's e-mail address *

Verify e-mail address

Address of incident (This must be within the City Limits of Tyler,

Improvements Cont....

Additional Information boxes...



Serial number of item #3

Value of item #3

Please provide a detailed description about the incident you are reporting. *

Read and affirm statute Sec. 37.08

Sec. 37.08. FALSE REPORT TO PEACE OFFICER, FEDERAL SPECIAL INVESTIGATOR, OR LAW ENFORCEMENT EMPLOYEE
(a) A person commits an offense if, with intent to deceive, he knowingly makes a false statement that is material to a criminal investigation and makes the statement to:
(1) a peace officer or federal special investigator conducting the investigation; or
(2) any employee of a law enforcement agency that is authorized by the agency to conduct the investigation and that the actor knows is conducting the investigation.
(b) In this section, "law enforcement agency" has the meaning assigned by Article 59.01, Code of Criminal Procedure.
(c) An offense under this section is a Class B misdemeanor.

Affirm Statute *

By checking this box, I affirm that I have read and understand the above Texas Statute and that the information contained herein is true and correct to the best of my knowledge.

Also send me a copy

SUBMIT

* Required

Improve Phase

9. Implement Improvements



TYLER POLICE DEPARTMENT

LOYALTY ★ COURAGE ★ INTEGRITY

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903-631-1090 | CALL 9-1-1 In Emergency

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Vehicle Burglary - Property stolen from a motor vehicle. If you want your vehicle processed for physical evidence or there is traceable evidence left at the scene, you must contact the Tyler Police Department. (Car stereo-radio, personal property stolen, i.e. purse, phone, CDs etc. and there are no known suspects.)

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[Privacy Statement](#) | [Terms of Use](#) | Copyright (c) 2012 Tyler Police Department

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Citizen's Incident Report Online Form

First Name*	Middle Initial	Last Name*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Address 1*	Address 2	City*
<input type="text"/>	<input type="text"/>	<input type="text"/>
State*	Zip Code*	Today's Date*
<input type="text" value="Alabama"/>	<input type="text"/>	<input type="text"/>
Home Phone*	E-Mail Address	Date of Offense*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Work Phone Number	DL/ID Number and State*	Date of Birth*
<input type="text"/>	<input type="text"/>	<input type="text"/>
Location of Offense (must be within Tyler City Limits)*		
<input type="text"/>		
Property/Vehicle Description (serial number, model, make etc.)*Insurance Company or Business Requiring Report		
<input type="text"/>		<input type="text"/>
Complete detailed Narrative/Description of incident*		
<input style="width: 100%; height: 100%;" type="text"/>		

Submit

Improve Phase

9. Implement Improvements



LOST PROPERTY REPORT

You must complete all required fields. If the suspect in your case is known you must contact the Tyler Police Department and can not use this form to report your incident.

Please use the Manage Form Option to Develop your Form

Name of person making report (victim) - Last Name, First Name MI *

Victim's address *

Victim's date of birth (MM/DD/YYYY) *

Victim's Sex *
Female

Victim's Race *
Asian/Pacific Islander

Victim's Phone Number (include area code) *

Victim's e-mail address *

Verify e-mail address

Address of incident (This must be within the City Limits of Tyler,

Texas.) *

Type of location *
Residence-Single Family

Date the item was last seen (MM/DD/YYYY) *

Time the item was last seen (enter a.m. or p.m.) *

Date the item was noticed lost (MM/DD/YYYY) *

Time the item was noticed lost (please note a.m. or p.m.) *

Description of missing item #1 *

Serial number of item #1

Serial number of item #3

Value of item #3

Please provide a detailed description about the incident you are reporting. *

Read and affirm statute Sec. 37.08

Sec. 37.08. FALSE REPORT TO PEACE OFFICER, FEDERAL SPECIAL INVESTIGATOR, OR LAW ENFORCEMENT EMPLOYEE.
(a) A person commits an offense if, with intent to deceive, he knowingly makes a false statement that is material to a criminal investigation and makes the statement to:
(1) a peace officer or federal special investigator conducting the investigation; or
(2) any employee of a law enforcement agency that is authorized by the agency to conduct the investigation and that the actor knows is conducting the investigation.
(b) In this section, "law enforcement agency" has the meaning assigned by Article 59.01, Code of Criminal Procedure.
(c) An offense under this section is a Class B misdemeanor.

Affirm Statute *

By checking this box, I affirm that I have read and understand the above Texas Statute and that the information contained herein is true and correct to the best of my knowledge.

SUBMIT

Also send me a copy

* Required

Control Phase

12. Implement Process Controls

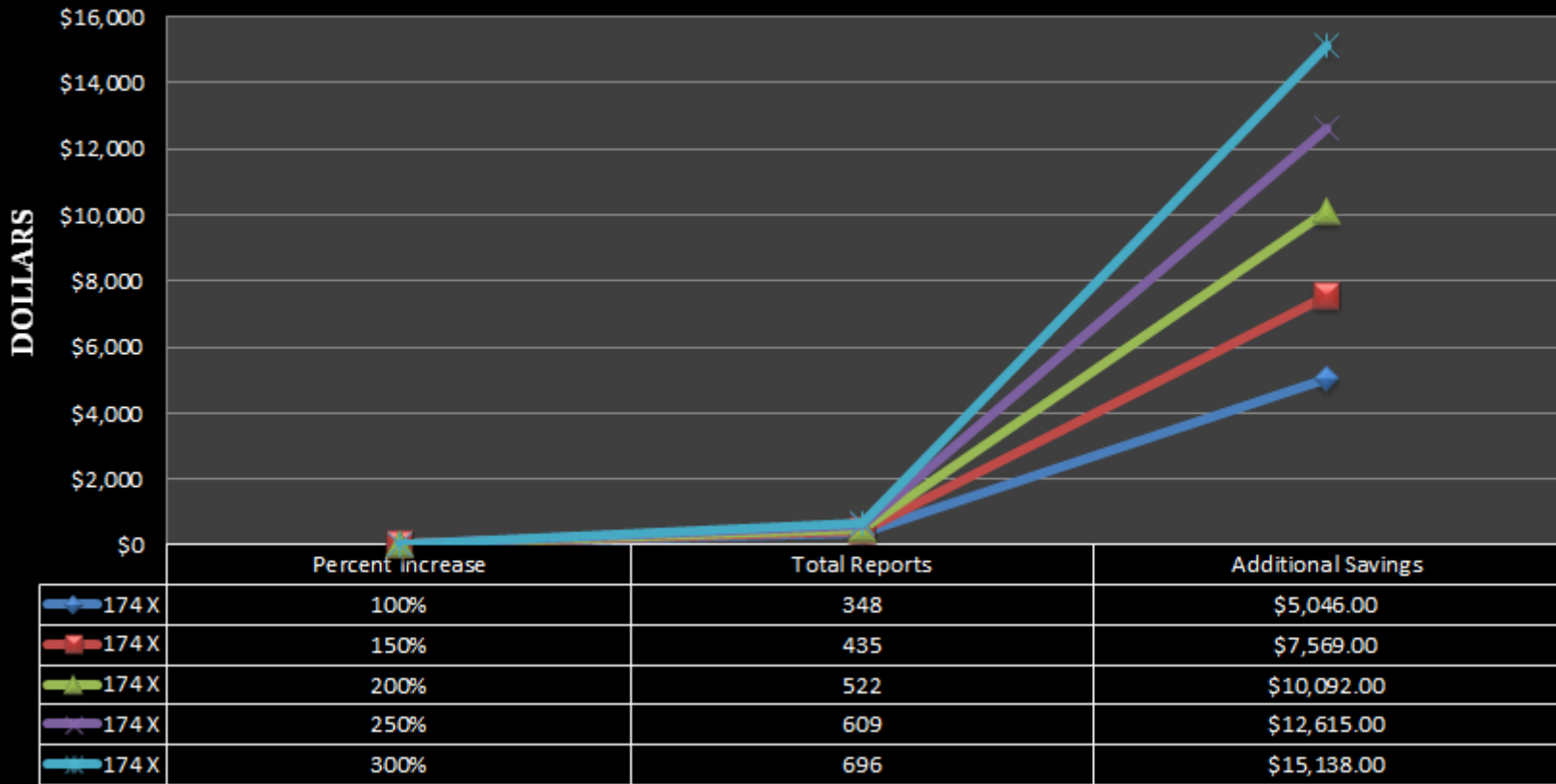


- 1. Evaluate Current Policies and Procedures*
- 2. Ensure CALEA Compliance*
- 3. Update Report Manual Guidelines*
- 4. Provide Departmental Training*



Potential Financial Savings 2012-2013

Potential Online Report Savings



Next Steps



1. Continue to work on webpage development designs.
2. Research the new CAD implementation time frame.
3. Coordinate public awareness for interim new online process and new reports being accepted.
4. Secure budgetary funds for reporting software.

Reducing Solid Waste Tire Costs



**Project Start: January
2012**

Project Revision:1



Project Charter

Project Authorization

Organization:	Champion:
Solid Waste	Dan Brotton
Project:	
Reduce Solid Waste Tire Costs	

Problem Statement:

The City of Tyler Solid Waste Department is experiencing a problem with the cost of tires. The problem has continued to increase. The magnitude of the problem is that new tire costs are rising by 25-30 percent and the number of flats we are having is increasing. The expected performance would be less than \$114,000 for residential truck tires and \$118,000 for commercial truck tires.

Project Objective:

Reduce tire cost by 10 percent.

Project Definition and Scoping

Metrics (unit of measure):

Find schedule for running the magnet truck at Landfill, ask if shingle trucks are sent to a special place
quality of patch work

where the truck picks up a nail

how well the driver takes care of airing up tires

low tread on tires

weight and heat tears up tires

Tire test on 7733 started March 2010:

Firestone Brand New Steer Tires lasted six months (7,000 miles)

Firestone Recap Drive Tires lasted eight months (9,252 miles) Don't turn as often as the steer tires.

Define Phase



Define Phase



Define Phase



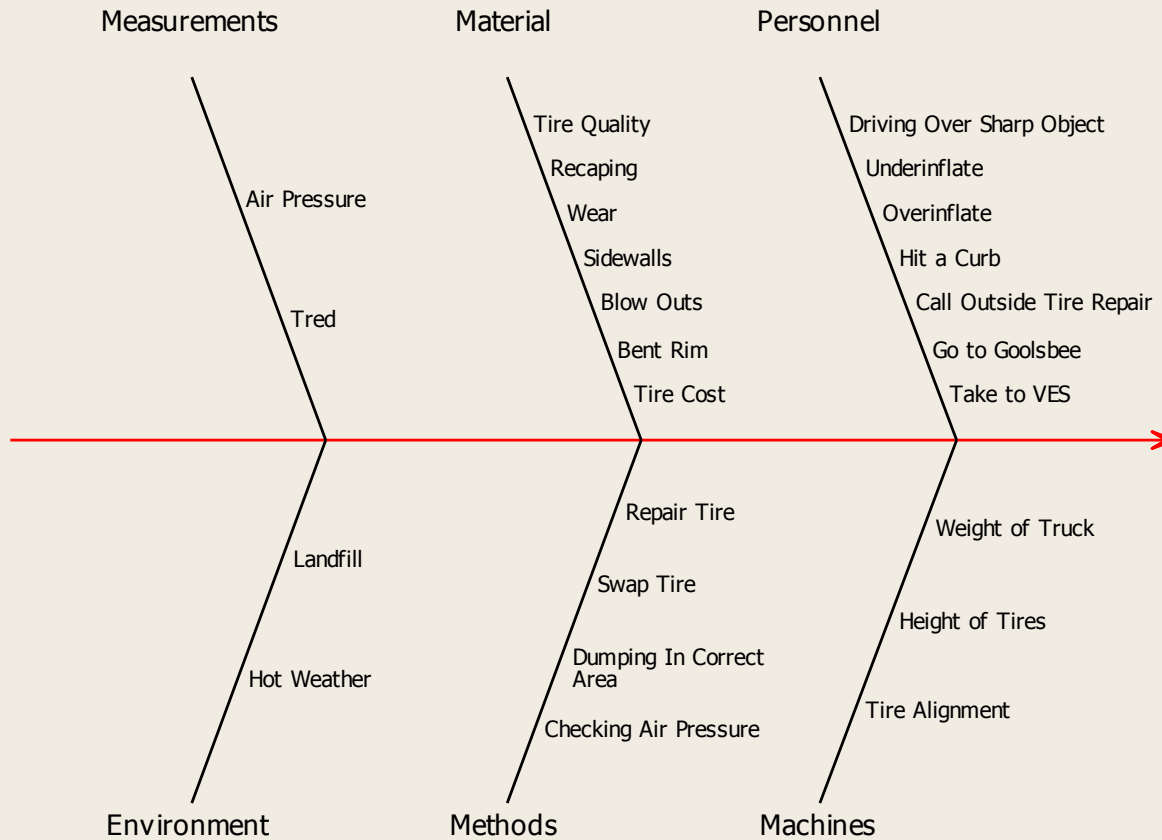


Price increased on all tire types

Tire Type	2011 new	2012 new	2011 recap	2012 recap
315 Residential and Rolloff Steer	\$310	\$408	\$205	\$220
425 Frontload	\$415	\$512	n/a	n/a
11R225 Frontload and Rolloff	n/a	n/a	\$135 or \$175	\$165 or \$225
Pickup Truck	\$105	\$108	n/a	n/a



Cause-and-Effect Diagram



Measure Phase



YX Diagram

Demo

Process: Tire Failure

Ranking

1	3	5	7	9
Unlikely	Some w hat unlikely		Some w hat likely	Most Likely

Delete

View
Summary

Output Variables (Ys)	Description	1	2	3	4	5	6	7	8	9	10
		Under Inflate	Over Inflate	Hit The Curb	Tread Depth	Sharp Objects					
Weight		9									

Input Variables (Xs)												Ranking
1 Landfill		1	1	1	1	9						9
2 Man		9	9	9	5	7						81
3 Weather		7	7	1	1	1						63
4 Alignment		1	1	9	9	1						9
5 Tire Quality		5	5	1	9	1						45

Analyze Phase





- ▶ Recaps last for an average of 8 months = 9,000 miles = 1,500 work hours.
- ▶ Steer tires last for an average of 6 months = 7,000 miles = 880 works hours.

Analyze Phase



When we receive a new truck we take the rear tires off and put recaps on it and use them on our Residential and Roll Off Trucks as steer tires. It cost \$1,760 to replace all 8 tires but it cost \$3,264 for 8 new steer tires by taking the tire off we save \$1,504 a truck. One truck we can use the tires on 2 residential or 4 roll off trucks.

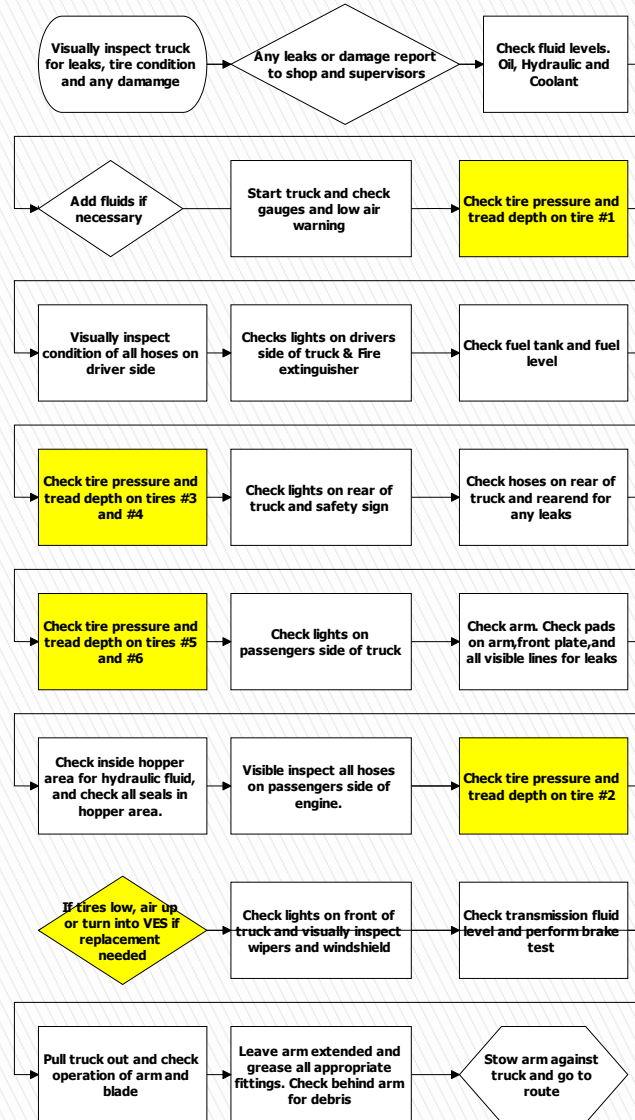
Analyze Phase



Analyze Phase



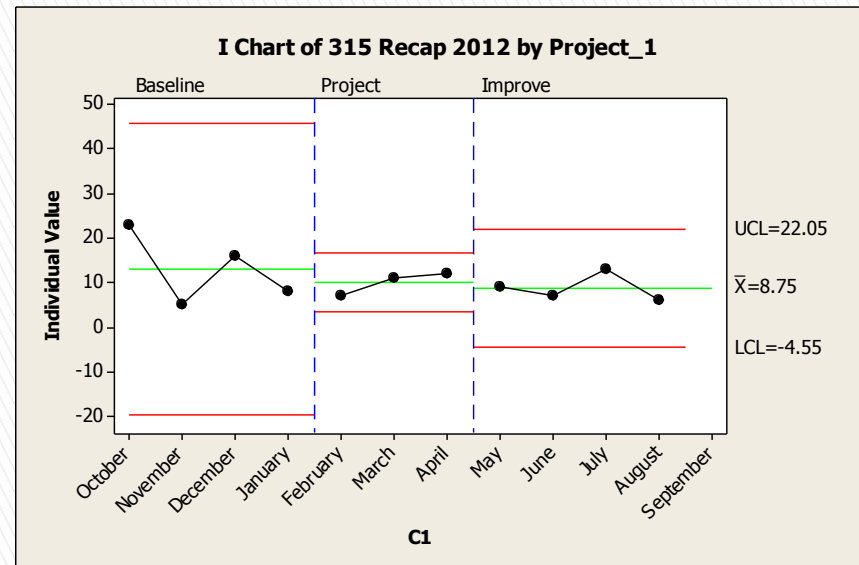
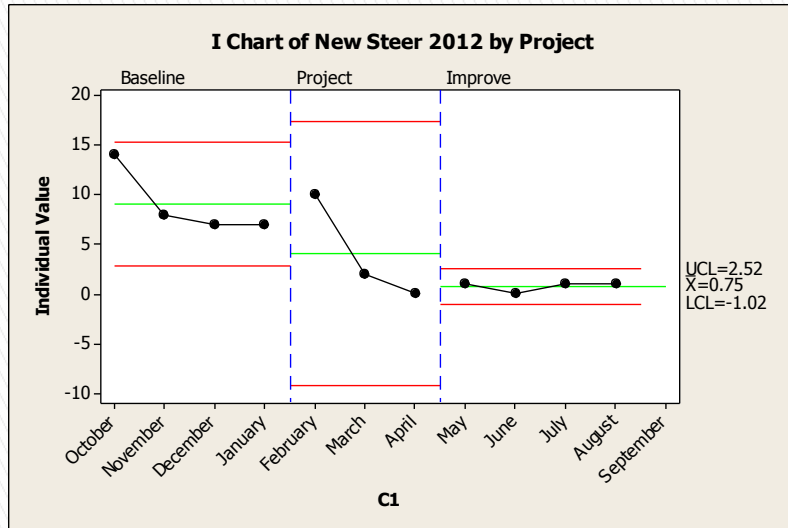
Pre-Trip Process Map



Improve Phase



Improve Phase





Preliminary Hard Dollar Savings


	New Steer 2011	New Steer 2012	Project
October	12	14	Baseline
November	2	8	Baseline
December	8	7	Baseline
January	20	7	Baseline
February	4	10	Project
March	7	2	Project
April	8	0	Project
May	3	1	Improve
June	4	0	Improve
July	11	1	Improve
August	9	1	Improve
September	7		Improve
	95	51	
	\$ 408.00	\$ 408.00	
Comparison	\$ 38,760.00	\$ 20,808.00	\$ 17,952.00

	315 Recap 2011	315 Recap 2012	Project
October	8	23	Baseline
November	8	5	Baseline
December	12	16	Baseline
January	13	8	Baseline
February	14	7	Project
March	17	11	Project
April	7	12	Project
May	8	9	Improve
June	10	7	Improve
July	8	13	Improve
August	12	6	Improve
September	12		Improve
	129	117	
	\$ 220.00	\$ 220.00	
Comparison	\$ 28,380.00	\$ 25,740.00	\$ 2,640.00

	2011	2012	Total
Preliminary Savings Comparison	\$ 67,140.00	\$ 46,548.00	\$ 20,592.00



New Pre-Trip Form

 Solid Waste Vehicle Report Automated Trucks Safety Check List		
Vehicle _____	Date _____	
Hour Reading _____	Driver _____	
Start _____		
Finish _____		
SERVICE CHECKS		
	Pre-Trip	Post-Trip
1. Visually inspect truck		
2. Check fluid levels:oil, hydraulic,coolant		
3. Start truck, check gauges & low air warning		
4. Check Tire #1: pressure, tread, lugs		
5. Visually inspect engine area drivers side		
6. Check lights drivers side and fire extinguisher		
7. Check fuel tank and fuel level		
8. Check Tires 3 & 4:pressure,tread,lugs		
9. Check lights on rear and safety sign		
10. Check rearend for leaks and hoses on rear		
11. Check Tires 5 & 6:pressure,tread,lugs		
12. Check lights on passengers side of truck		
13. Check Arm:pads, plate and all visible lines		
14. Check hopper area leaks and seals		
15. Inspect engine area on passengers side		
16. Check Tire #2:pressure,tread depth, lugs		
17. Check lights on front of truck		
18. Check transmission fluid		
19. Perform Brake Test		
20. Check operation of arm & grease		
Any Defects: _____		
Quantities of Fluids Added: _____	Oil: _____	Fuel _____
I understand that this is an Official City of Tyler document and I certify that I have checked everything listed above.		
Signed: _____		

		
1. Visual Inspection	2. Check oil, hydraulic & Coolant	3. Start Truck, check gauges
		
4. #1 psi	5. Visual inspect engine area	6. Lights & extinguisher drivers side
		
7. Fuel tank & Fuel level	8. #3 psi #4 psi	9. Lights on rear & safety sign
		
10. Check for leaks on rearend & Hoses	11. #5 psi #6 psi	12. Lights on pass. side
		
13. Check arm: pads, plate and lines	14. Check hopper area leaks and seals	15. Engine area on passengers side
		
16. # 2 psi	17. Lights on front	18. Transmission Fluid
		BE SAFE & ACCIDENT FREE TODAY
19. Perform brake test	20. Operation of arm & grease	



Next Steps

- Continue to use new pre-trip form with crew leaders oversight
- Implement and update procedures
- Continue to monitor tire costs
- Look at Recap Tires as a future project

Improve Work Order Flow



Project Start: 8-9-2012

Project Champion: Stephanie Rollings

Black/Green Belt: Heather Bolestridge

Define Phase

1. Select Output Characteristics




Champion Project Worksheet			Champion:	
Step	Action	Information Elements for Defining Project	Definition/Explanation	Actual Project Information
1. Identify the specific problem that needs to be solved per the business case or other source.	1A	WHAT is the actual problem?	A business condition or impediment to success stated as the high level effect the problem is having on the business. This is usually in terms of cost, revenue, quality or delivery.	There is no workorder system in place in the Parks Department.
	1B	WHERE is the problem occurring?	Define where the problem is occurring. Include a geographic name such as city or facility and the name of the business area; i.e., Accounts Receivable, Purchasing, Manufacturing...	Parks Department
	1C	The TIMEFRAME over which this problem has existed?	Define when the problem first began or the timeframe over which it has existed. Example: Began Feb 2005, for the past 15 mos., or has always existed.	Consistant for several years
	1D	WHO is the customer(s) most affected by this problem?	Identify who the customer is that is most impacted by this business problem. This could be an internal or an external customer.	the parks crew/customers
2. Determine the Y's (CTO's), what specifically needs to be improved and the baseline performance level.	2A	Determine the characteristic or process output (Y's) that will be improved to solve this problem.	Name the Y which you intend to improve in order to solve the problem; i.e., Product Test Yields, Customer Complaints, Invoice Errors, Response Time....	work order completion percent reported
	2B	Identify the PRIMARY METRIC for each Y that numerically describes the problem and will be used to measure and track improvement.	This is a combination of the name for the Y and the unit of measure associated with it. Example: motor torque % defective, defects per invoice, call back response time in minutes.	reported completion
	2C	Estimate the magnitude, BASELINE PERFORMANCE, of the problem in terms of the primary metric.	Data should be gathered to determine the performance or behavior of the primary metric, assure the data is long term and not short term data. An Excel macro can be used to plot the data as a function of time and then be used to monitor the improvement as a function of time. This data establishes the base from which to calculate the potential financial benefits of the project, as a function its improvements.	88% not reported which gives us a DPMO of 879,699
	2D	Identify a CONSEQUENTIAL METRIC.	This is any other characteristic or process output you will want to monitor to assure there is no negative impact to another area from solving the problem.	time it takes to complete, much higher number completed than documented, staff vs work order load

The Champion Project Worksheet is the starting point for every project. The worksheet helps set parameters for the selected project and keeps all of the initial information in one, easy-to-read place.

Define Phase

2. Define Performance Standard



 Lean Sigma Project Charter						
Project Title:	Improve Parks Work Order Flow			Project No. P1		
Team Members - Who		Authorization Date:		6-Aug-12		
Process Owner:	Tim Norris	Team Members: (5-7 Core team + customer contact)				
Process Champion:	Tim Norris	Name		Name		
Controller:	Jim Yanker	Jimmy Vega				
Process Expert:	Tim Norris	Jose Parga				
Black/Green Belt:	Heather Bolestridge	Todd Lestage				
Black Belt Mentor:		Chris Vega				
Master Black Belt:	Guillermo Garcia					
Project Champion:	Stephanie Rollings					
Key Leader:	Stephanie Rollings					
Project Description						
Project Scope and Boundaries:	The extent of the project (e.g. CBU, Plants, Production Lines, Products, etc.) and the boundaries that limit the project: Work order system in the Parks Department					
Measurable	The Customer focused measurable to be improved:					
	Business Metric:					
	Project Metric/Primary Metric		DPMO Reported Completion			
Secondary Metric		Time to complete work order				
Problem Statement:	<p>"What is wrong with where and I know this because." What is the spec, actual performance and gap in performance (problem) as evidenced by the results of the BIC/Project Metric :</p> <p>As a department, we are experiencing a problem with our work order flow. The area where the problem is occurring is at all of our parks. The problem has existed since the parks department was established. The magnitude of the problem is 88% of work orders not being reported closed which gives us a DPMO of 879,699. The expected performance is to have less than 10% not reported. The effect this problem is having on our business is a slow turn around on work completion and wasted time and money with follow ups. This is costing us an estimated \$40,597.00 per year.</p>					
Goal Statement:	<p>The Objective Statement should directly address the information in the Problem Statement. Indicate the level of improvement is expected. Should be specific and quantifiable:</p> <p>Our goal is to reduce our defect rate by 90% and to save an estimated \$36,537 per year in soft and hard dollars.</p>					
Project Objective:	Increase / Decrease The Business/Customer Ys by what amount / percent. % Defect					
	Project Metrics	Baseline	Current	% Improve	Goal	
	DPMO Reported Completion	879,699	890,898	90%	87970	
	Time to complete work order					
Rationale for Hard Dollars:	<p>What are the line items that provide the foundation behind the projected savings. Where does the money come from?</p> <p>Reduction in fuel usage to follow-up on non-closed work orders.</p>					
Estimated Savings and Leveragability:						
Leveragability <input type="radio"/> High <input type="radio"/> Medium <input checked="" type="radio"/> Low	Cost Analysis		% Cost Reduction	Potential Savings		
	Hard Dollars:	\$1,541	90%	\$1,386		
	Soft Dollars:	\$39,057	90%	\$35,151		
	Total Dollars	\$40,597		\$36,537		
Estimated Project Schedule - Phase Completion General Duration Chart						
Phase Weeks	Measure	Analyze	Improve	Control	Validation	Total
	3	3	3	3	4	16
Estimated Date of Completion	8/27/2012	9/17/2012	10/8/2012	10/29/2012	11/26/2012	26-Nov-12
Project Approval:						

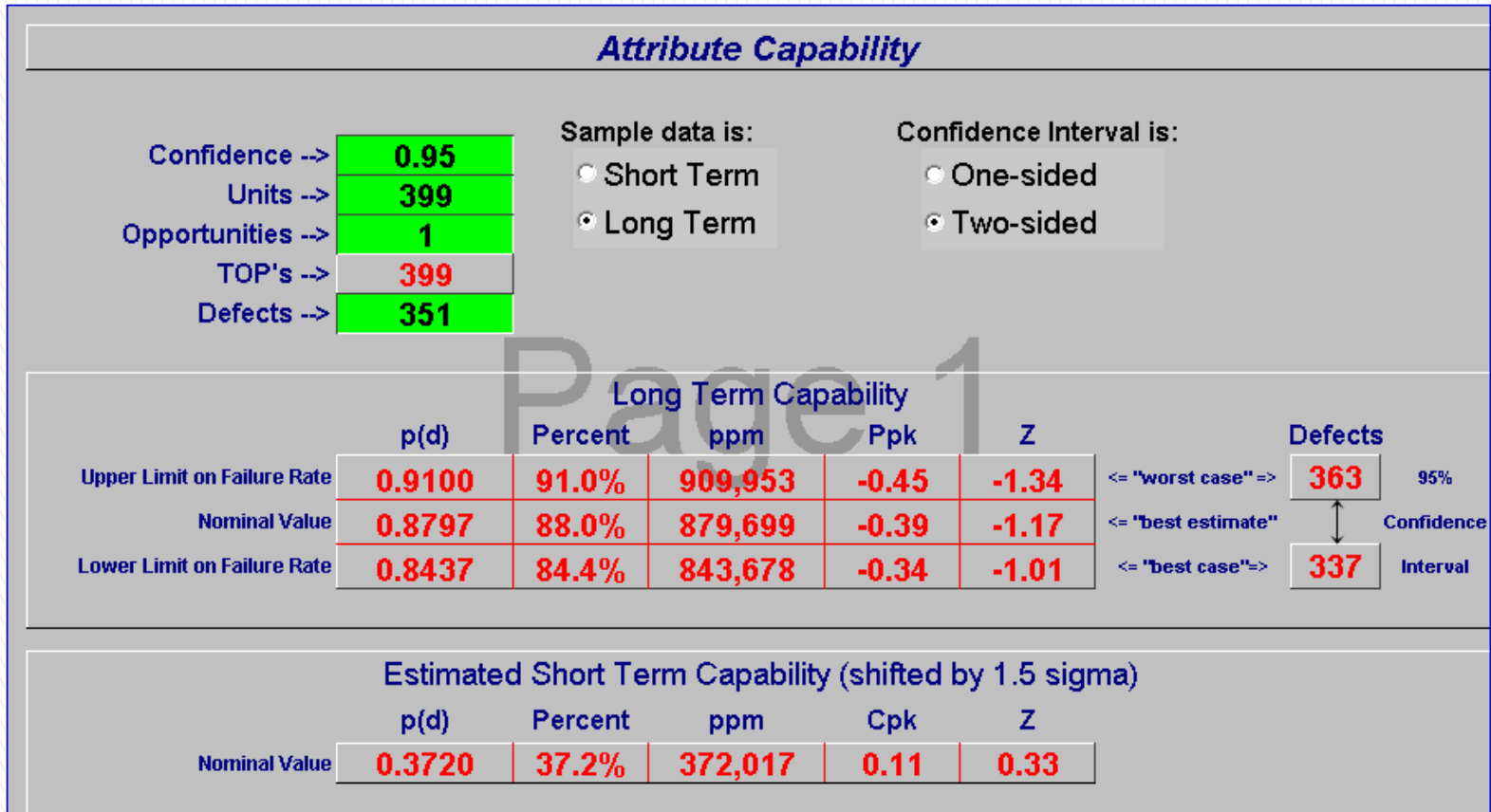
The Lean Sigma Project Charter is a “contract” between the Champion and Black Belt or Green Belt performing the project.

Problem Statement:

“As a department, we are experiencing a problem with our work order flow. The area where the problem is occurring is at all of our parks. The problem has existed since the parks department was established. The magnitude of the problem is 88% of work orders not being reported closed which gives us a DPMO of 879,699. The expected performance is to have less than 10% not reported. The effect this problem is having on our business is a slow turn around on work completion and wasted time and money with follow ups. This is costing us an estimated \$40,597.00 per year.”

Measure Phase

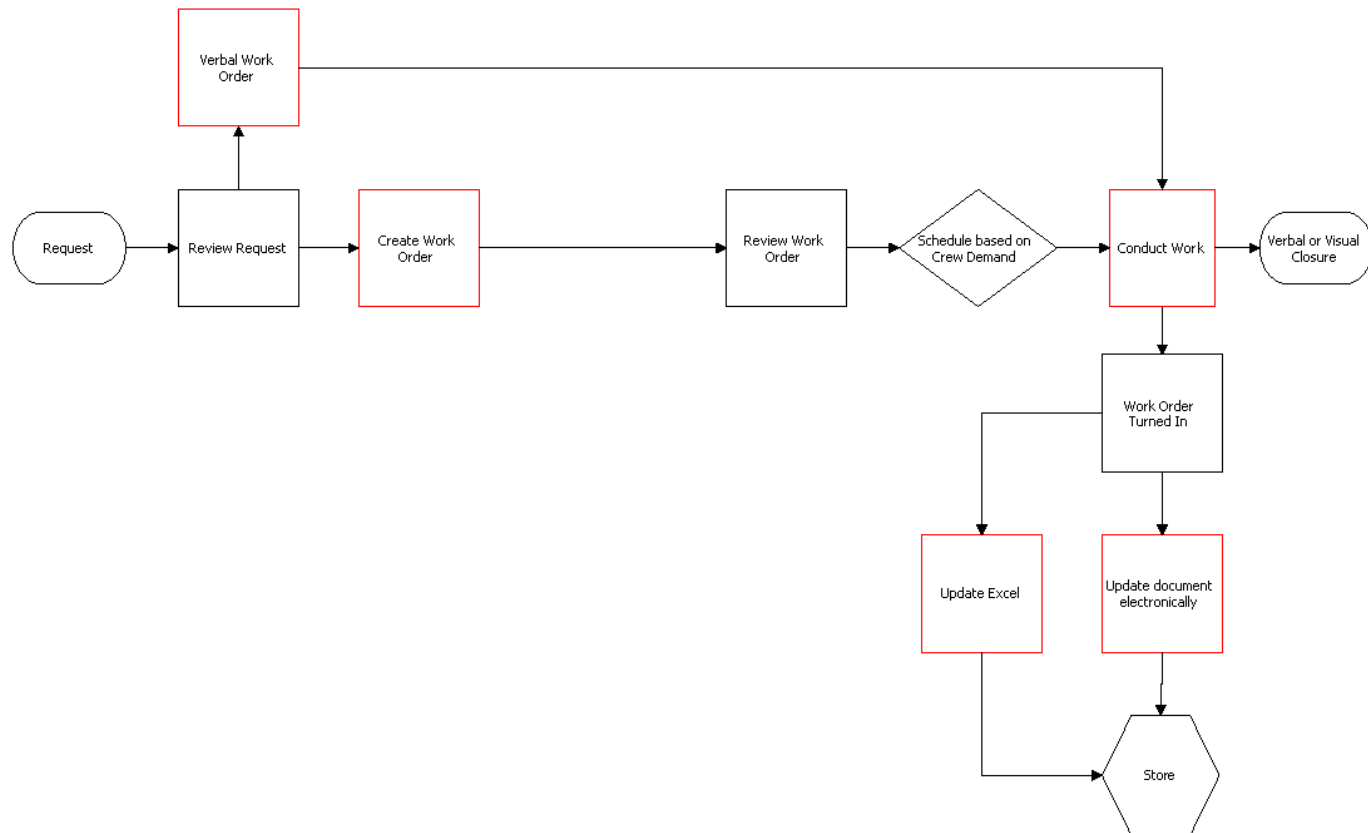
4. Baseline Capability



The process is performing at a less than 1 sigma level long-term. This indicates a system that is not properly functioning or being properly used.

Measure Phase

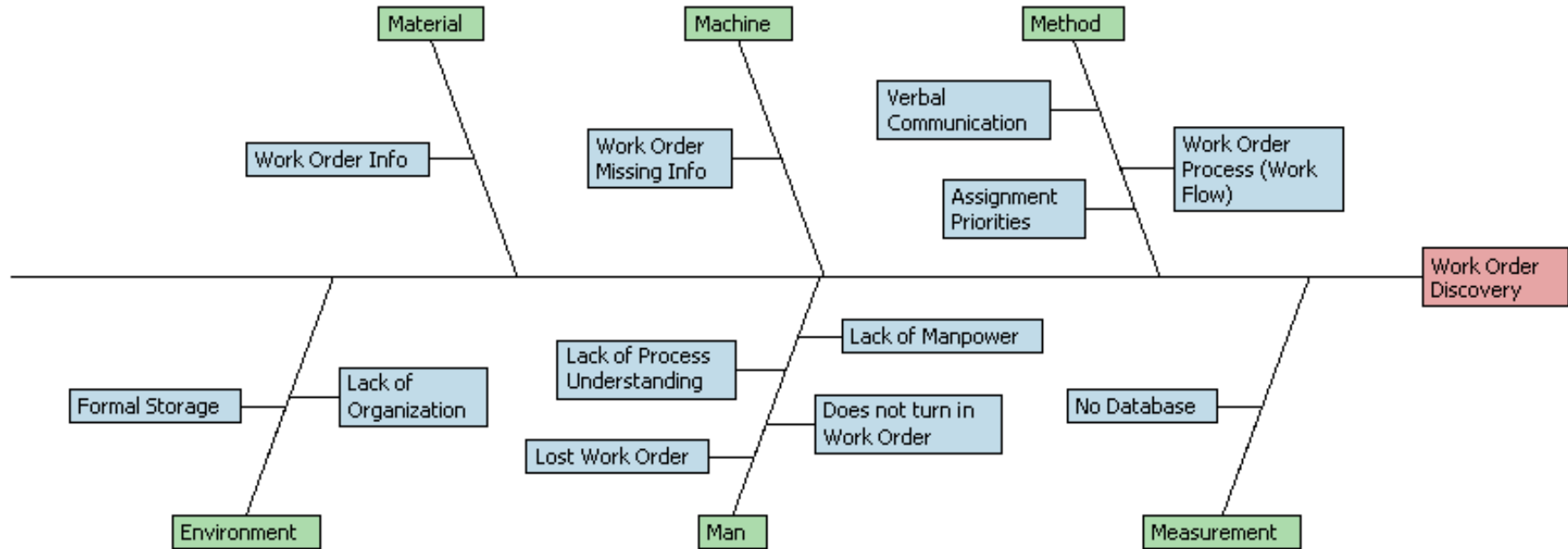
6. Identify Potential Variables



The process map outlines how the work order system flow is currently carried out.

Measure Phase

6. Identify Potential Variables



The fishbone diagram is a list of potential “problems” identified by key personnel associated with the process.

Measure Phase

6. Identify Potential Variables

YX Diagram Summary

Process:	Improve work order flow
Date:	Aug/15/2012

Output Variables	
Description	Weight
completed work orders	9
update work orders	9
work orders not recorded	7
reported work order	7

Input Variables	
Description	Ranking
lack of technology	288
forgetting workorders	288
no database	274
does not turn in WO	234
lost work order	228
work order flow	227
lack of organization	223
complexity of work order	218
Formal Storage	214
access to the database	209
rework/follow up	204
advance notice	199
lack of manpower	194
verbal communication	188
lack of process understanding	184
assignment priorities	99

Key personnel say down and completed a YX Diagram to prioritize “problem” areas from the identified key variables.

Analyze Phase

7. Identify Potential Leverage



After determining the potential problem with the highest outcome, we began doing research by analyzing best practices among Parks Departments around the U.S. by using the Alliance for Innovation as well as cold calling.

Knowledge Question:

“We are looking for information on best practices for a municipal work order system. It can be an electronic or paper system. We have suspended the use of our current system and are looking to start over from the ground up, so any ideas would be helpful.”

Analyze Phase

7. Identify Potential Leverage



Parks Scan:

: Park Scan began in San Francisco in 2003 to provide a user friendly web portal for residents to cite needed improvements for city parks directly to city staff. The website also enables residents to upload pictures when they submit their observation. In 2007, Park Scan partnered with the city's 3-1-1 system which automates park observations directly to the city's work order system with the other 3-1-1 cases. This has lead to greater efficiency in staff's responses to the observations. Out of the 3,867 observations reported in 2009, 82% were closed. Additionally, through the website, all residents can see the observations made and their progress. Beginning in 2009, the City of Portland developed a Park Scan based off this program

(http://transformgov.org/en/knowledge_network/documents/kn/document/301669/san_francisco_park_scan).

Analyze Phase

7. Identify Potential Leverage



Work Order Assessment, O'Fallon, MO:

The Maintenance Division is able to deliver on all elements of park maintenance currently. Investing in maintenance technology that includes a work order system and establishing performance measures tied to written maintenance standards to develop staffing needs and equipment requirements, would help the staff to operate in the most efficient manner. This work order system would help the Maintenance Division to maximize their available resources and help create a more sustainable Department for the future as well as demonstrate the duties and tasks associated with park maintenance.

Overview of Existing Park Maintenance Organization Structure In “Best Practices” types of park and recreation organizations, the Facility Maintenance Division for park structures, pools and recreation centers are part of the overall Parks and Recreation Division. The primary reason for this is because facilities of this type operate year round, seven days a week and the demand to meet user needs requires greater attention than a five day operation typically found when a Facility Maintenance Division is located in another department. Based on the consultant’s operational experience, approximately 10% of agencies nation-wide have facility maintenance operating out of a separate Department.

In O’Fallon, the Facility Maintenance Division is under Administrative Services which at times causes a disconnect between program needs and facility requirements. When users complain about facilities, it is important for the Facility Maintenance Division to hear the issues raised by the community and then act on it versus hearing something second-hand from the program staff. This would help eliminate a “we/they” culture and foster greater cooperation among the two staff groups. When facility maintenance is within the Parks and Recreation Maintenance Division, there is a greater sense of urgency and accountability to meet the user’s needs and expectations by the Facility Maintenance Division staff.

For Parks and Landscape Maintenance, the existing organizational structure as outlined by staff in conversations with the Consulting Team appears to be designed in a very functional and efficient manner. No changes are recommended in how the organization is designed as it applies to Park and Landscape Maintenance.

Analyze Phase

7. Identify Potential Leverage



Synergy Work Order Review

Coherent enables the creation of unlimited categories of permits, licenses, inspections, etc. for the purpose of inspections and code enforcement. The Coherent Work Order Review Module enables managers to create and save code enforcement queries for various departments, organizations, and buildings. Reminders can be created to insure tasks are handled promptly and permit expirations are processed.

Features include

(http://synergyinfosys.com/parks_recreation.htm).

Analyze Phase

7. Identify Potential Leverage



Workorderama, City of Pittsfield, MA:

*Workorderama features a Web browser application interface that will allow staff and **selected** building occupants to request work orders via the Internet from their Web browser. This Web –Based Requester Interface is simple and easy to use – click on a link (or favorite) in either the City or School Web site, enter a User Name and Password and voila' your in! The Web Link is located on the City web site will be located under E-Services in the right hand corner of the Home page. There are a few required fields to fill out on the request form – Building, Room #, Location description and a brief description of the request - then click the Submit button; it's as easy as 1-2-3 (http://www.cityofpittsfield.org/work_order_system.htm).*



Integrating Work Order System with GIS

They must engage with work order systems, asset management systems, permitting systems, 311 systems, complaint center systems, and so on—with each system offering a different array of interfaces and data. When GIS is integrated with these systems, geography becomes the focal point for service and data, linking databases together, consolidating workflows, and presenting a common operating picture for the end user. For example, a supervisor can quickly find the location of a site, access the work orders pertaining to the site, visualize the site in 3D, generate detailed maps, and spatially analyze the problem before scheduling and routing field crews:

(http://www.esri.com/library/reprints/pdfs/publicworks_building-server-based.pdf).

Analyze Phase

7. Identify Potential Leverage



Developing a Work Order System:

Control, accountability, and allocation of scarce resources are the foundation of a good financial management system in any city. That's why a complete work order system is a good idea. It can enhance the financial manager's control and accountability of any public works project.

[http://www.mtas.utk.edu/KnowledgeBase.nsf/1eeffdc6080866a885257936005b10b4/8525703d00549dbd85256f7f0056e3ee/\\$FILE/Work%20Order%20Systems.pdf](http://www.mtas.utk.edu/KnowledgeBase.nsf/1eeffdc6080866a885257936005b10b4/8525703d00549dbd85256f7f0056e3ee/$FILE/Work%20Order%20Systems.pdf)

Analyze Phase

7. Identify Potential Leverage



Integrating 311 with Work Order System:

In less than six years, San Antonio, Texas (pop. 1.2 million), more than doubled the number of customer service calls the city receives while reducing the number of calls it loses by half. The city integrated its existing work order systems into a new 311 call center that responds to citizens while generating new data that is used by city departments to monitor and improve performance

(http://transformgov.org/en/Page/923/More_US_Local_Governments_Turning_to_311_Call_Systems_911_Calls_Drop_Sharply_with_311_Use_Survey_Sho).

Analyze Phase

7. Identify Potential Leverage



E-Complaint System - Coral Springs Fla.:

“The request is either handled right away and closed out; or a work order is generated to fix the problem. In the case of ongoing issues, a status report must be posted at least every two weeks, and the user can track the progress of the issue, using their tracking number. The Web manager, or anyone else with administrative proxy rights (such as the department head or city manager) can check on the status of any case at any time”

(http://transformgov.org/en/Article/10618/City_of_Coral_Springs_Develops_Innovative_EComplaint_System).

Analyze Phase

7. Identify Potential Leverage



Other Examples:

Many parks in Texas use some type of a “work order” system, whether it be paper-based or electronic others do not. Some I’ve seen through my research:

Beaumont uses the 3-1-1 system.

Longview uses some sort of an electronic service.

Mesquite has no work order system,

McKinney Does not use a call system, but rather uses calendars. Tasks are written on the calendar and doled out based on staff availability.

Lewisville – Used to use lotus notes but will not be using WEB CT which is similar to the City of Tyler’s CRM program.

The Woodlands use Excella, which is a service request/work order system.

Next Steps Phases 8-12



Other Examples:

- *Analyze Benchmarks*
- *Research currently available products in HTE*
- *Develop a new process flow*
- *Determine best available solution*
- *Implement Controls*

Define Phase

1. Select Output Characteristic



The goal is to identify juveniles that have not complied with their court order and proceed with the Juvenile FTA process within 30 days of their 18th birthday.





Existing Law:

- Effective Date: September 1, 2003.
- Pursuant to HB 2319, the above-referenced child and parent are hereby given written notice of their obligation under subsection (h) and (i) of Article 45.057, Code of Criminal Procedure:

A child and parent required to appear before the court have an obligation to provide the court in writing with the current address and residence of the child.

The obligation does not end when the child reaches age 17. On or before the 7th day after the child or parent changes residence, the child or parent shall notify the court of the current address in the manner directed by the court. A violation of this subsection may result in arrest and is a Class C misdemeanor.

Define Phase

1. Select Output Characteristic



Project Scope:

- The need to address unsettled juvenile cases still pending past their 17th birthday.

They feel nothing can be done on the juvenile tickets so the parents tend not to pay them even after they appear in Court.



Define Phase

1. Select Output Characteristic



Current Problem:

- Cases as old as September 1, 2003.
- There are at least 931 outstanding cases.
- There is currently \$387,049.81 in outstanding fines and fees owed to the City at this time.

Define Phase


2. Define Performance Standards



Project Charter

Project Charter

Project Authorization

Organization:	Champion:	Process Owner:
Municipal Court	Cam McCabe	
Project:	Project #:	
Juvenile FTA Program		
Problem Statement:		
As a company, we are experiencing a problem with: Juvenile Appearance Process_ The area where this problem is occurring is: Municipal Court. The problem has existed for at least: 2 years. The magnitude of the problem is: currently 100% and the expected performance is: < 10%. The effect this problem is having on our business is: outstanding cases and lost of revenue. This is costing us a much as \$387,049.81 in Total Revenue.		
Project Objective:		
Reduce the number of outstanding juvenile cases (estimated 931 cases) after the individual's seventeenth birthday. Currently no process is in place to issue the fail to appear warrants on these outstanding cases. The objective is to establish a process that issues the fail to appear warrants 30 days after the defendants 17th birthday. Improve current process by 80%		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
100%	10%	
Approval Date:	Champion Signature:	Process Owner Signature:
2/3/2012 		

There is currently no process in place to deal with juvenile defendants once they turn 17.

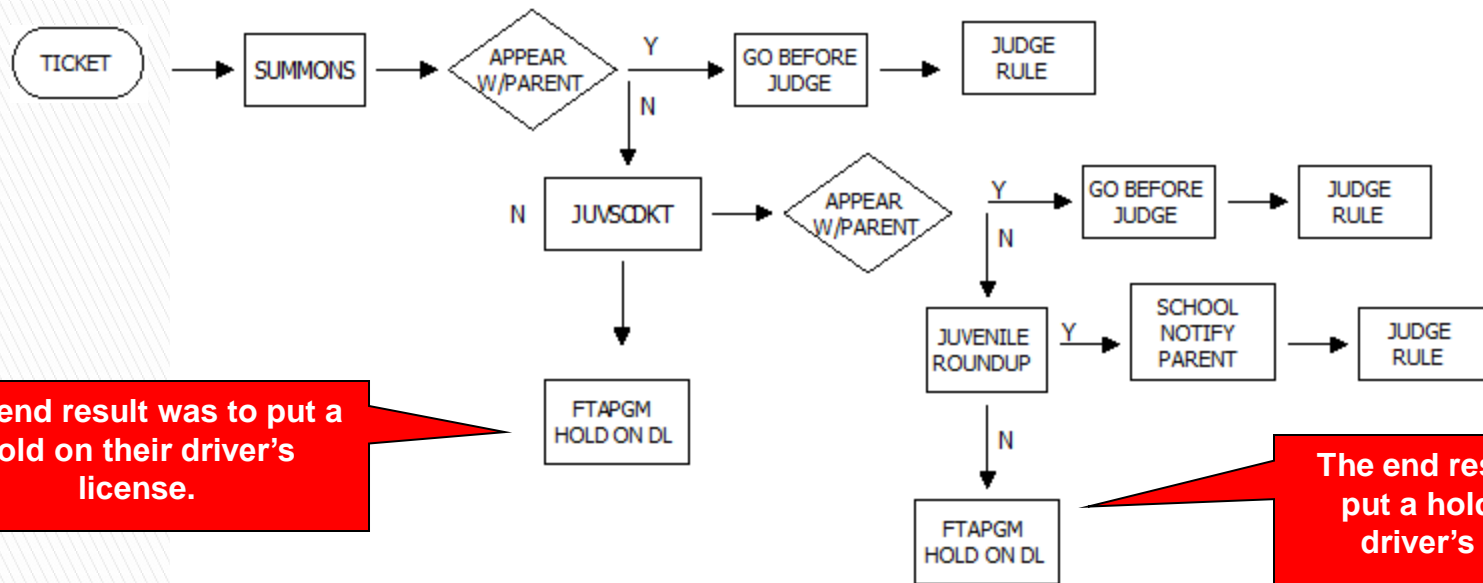
Our objective is to identify all existing defendants within 30 days of their 18th birthday.

Measure Phase

6. Identify Variation Sources

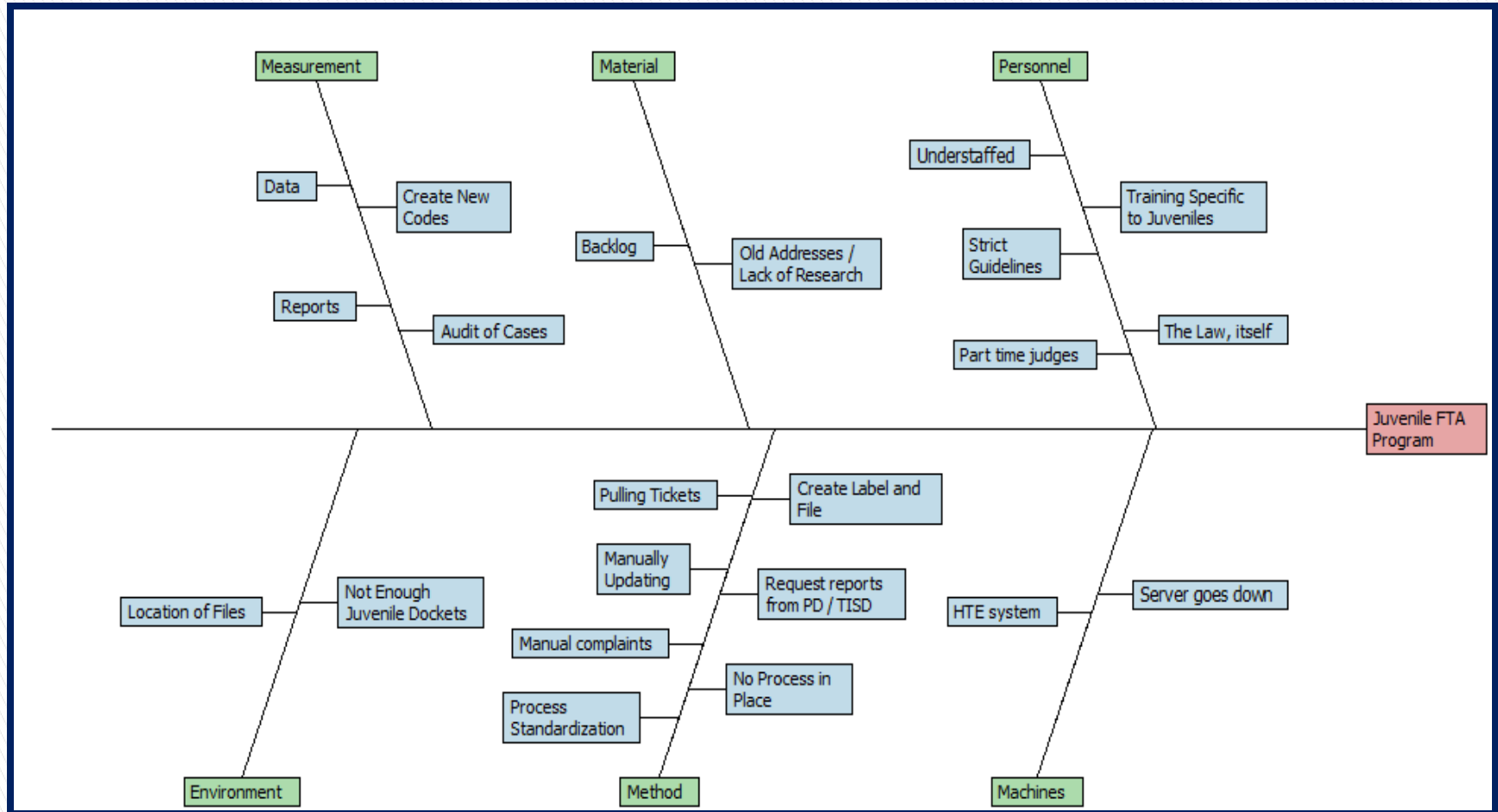


Juvenile Process prior to Lean Sigma



Measure Phase

6. Identify Variation Sources



Measure Phase

6. Identify Variation Sources



YX Diagram Summary

Process:	Juvenile FTA
Date:	9/19/2012

Output Variables	
Description	Weight
Juvenile FTA	9

Input Variables	
Description	Ranking
Strict Guidelines	81
The Law	81
No Process in Place	81
Request Reports from PD / TISD	81
Data	63
Reports	63
Create New Codes	63
Training	63
Old Address/Lack of Research	63
Part time Judges	45
Understaffed	45
Process Standardization	45
H.T.E. system	45
Audit of Cases	27
Backlog	27
Manually Updating	27
Not enough Juvenile Dockets	27
Manual Complaints	27
Location of Files	27
Pulling of Tickets	27
Create Label and File	9
Server goes down	9

The most significant factor include strict guidelines, the law, no process in place and documentation.

Analyze Phase

8. Determine Optimal Solutions



MUNICIPAL JUVENILE/MINOR CHART



Alcoholic Beverage Code	Alcoholic Beverage Code/DUI/BUI	Education Code	Health and Safety Code	Penal Code	Transportation Code Chapter 729
*		<ul style="list-style-type: none"> • Court must notify child of right; • Court must give copy of Art. 45.0216, C.C.P.; • Not more than one conviction; • Child may apply on or after age 17; • Apply to trial court; • Child makes request under oath; • Court shall charge \$30 fee. 			
<p>Child Turns Age 17 after Failure to Appear</p> <p>Art. 45.060, C.C.P. Court must have used all available procedures under Chapter 45 to secure appearance while under the age of 17 before proceeding under Art. 45.060, C.C.P. At age 17 or older, court issues an order to appear. Order must have a warning about continuing obligation to appear and that failure to appear may result in a warrant being issued. If person fails to appear after notice, prosecutor may file complaint for violation of obligation to appear under Art. 45.060 and court may issue a warrant of arrest.</p>	<p>Art. 45.060, C.C.P. Court must have used all available procedures under Chapter 45 to secure appearance while under the age of 17 before proceeding under Art. 45.060, C.C.P. At age 17 or older, court issues an order to appear. Order must have a warning about continuing obligation to appear and that failure to appear may result in a warrant being issued. If person fails to appear after notice, prosecutor may file complaint for violation of obligation to appear under Art. 45.060 and court may issue a warrant of arrest.</p>	<p>Art. 45.060, C.C.P. Court must have used all available procedures under Chapter 45 to secure appearance while under the age of 17 before proceeding under Art. 45.060, C.C.P. At age 17 or older, court issues an order to appear. Order must have a warning about continuing obligation to appear and that failure to appear may result in a warrant being issued. If person fails to appear after notice, prosecutor may file complaint for violation of obligation to appear under Art. 45.060 and court may issue a warrant of arrest.</p>	<p>Art. 45.060, C.C.P. Court must have used all available procedures under Chapter 45 to secure appearance while under the age of 17 before proceeding under Art. 45.060, C.C.P. At age 17 or older, court issues an order to appear. Order must have a warning about continuing obligation to appear and that failure to appear may result in a warrant being issued. If person fails to appear after notice, prosecutor may file complaint for violation of obligation to appear under Art. 45.060 and court may issue a warrant of arrest.</p>	<p>Art. 45.060, C.C.P. Court must have used all available procedures under Chapter 45 to secure appearance while under the age of 17 before proceeding under Art. 45.060, C.C.P. At age 17 or older, court issues an order to appear. Order must have a warning about continuing obligation to appear and that failure to appear may result in a warrant being issued. If person fails to appear after notice, prosecutor may file complaint for violation of obligation to appear under Art. 45.060 and court may issue a warrant of arrest.</p>	<p>Art. 45.060, C.C.P. Court must have used all available procedures under Chapter 45 to secure appearance while under the age of 17 before proceeding under Art. 45.060, C.C.P. At age 17 or older, court issues an order to appear. Order must have a warning about continuing obligation to appear and that failure to appear may result in a warrant being issued. If person fails to appear after notice, prosecutor may file complaint for violation of obligation to appear under Art. 45.060 and court may issue a warrant of arrest.</p>
<p>Child Turns age 17 after Failing to Pay Fine: <i>Capias Pro Fine</i>, Art. 45.045, C.C.P.</p> <p>Art. 45.045, C.C.P. Court must determine before issuing a <i>capias pro fine</i>: • that person is age 17 or older; • that issuance of <i>capias pro fine</i> is justified (must consider sophistication & maturity, criminal record and history of individual, and the reasonable likelihood of bringing about the discharge of judgment by other procedures); and • that the court has proceeded under Art. 45.050, C.C.P.</p>	<p>Art. 45.045, C.C.P. Court must determine before issuing a <i>capias pro fine</i>: • that person is age 17 or older; • that issuance of <i>capias pro fine</i> is justified (must consider sophistication & maturity, criminal record and history of individual, and the reasonable likelihood of bringing about the discharge of judgment by other procedures); and • that the court has proceeded under Art.</p>	<p>Art. 45.045, C.C.P. Court must determine before issuing a <i>capias pro fine</i>: • that person is age 17 or older; • that issuance of <i>capias pro fine</i> is justified (must consider sophistication & maturity, criminal record and history of individual, and the reasonable likelihood of bringing about the discharge of judgment by other procedures); and • that the court has proceeded under Art. 45.050,</p>	<p>Art. 45.045, C.C.P. Court must determine before issuing a <i>capias pro fine</i>: • that person is age 17 or older; • that issuance of <i>capias pro fine</i> is justified (must consider sophistication & maturity, criminal record and history of individual, and the reasonable likelihood of bringing about the discharge of judgment by other procedures);</p>	<p>Art. 45.045, C.C.P. Court must determine before issuing a <i>capias pro fine</i>: • that person is age 17 or older; • that issuance of <i>capias pro fine</i> is justified (must consider sophistication & maturity, criminal record and history of individual, and the reasonable likelihood of bringing about the discharge of judgment by other procedures);</p>	<p>Art. 45.045, C.C.P. Court must determine before issuing a <i>capias pro fine</i>: • that person is age 17 or older; • that issuance of <i>capias pro fine</i> is justified (must consider sophistication & maturity, criminal record and history of individual, and the reasonable likelihood of bringing about the discharge of judgment by other procedures); and • that the court has proceeded under Art. 45.050, C.C.P.</p>

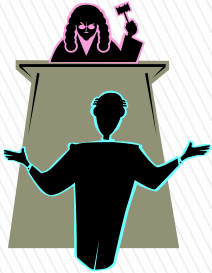
The laws and guidelines pertaining to issuing of warrants on juveniles.

Analyze Phase

8. Determine Optimal Solutions



Juvenile Procedures Developed by Judge



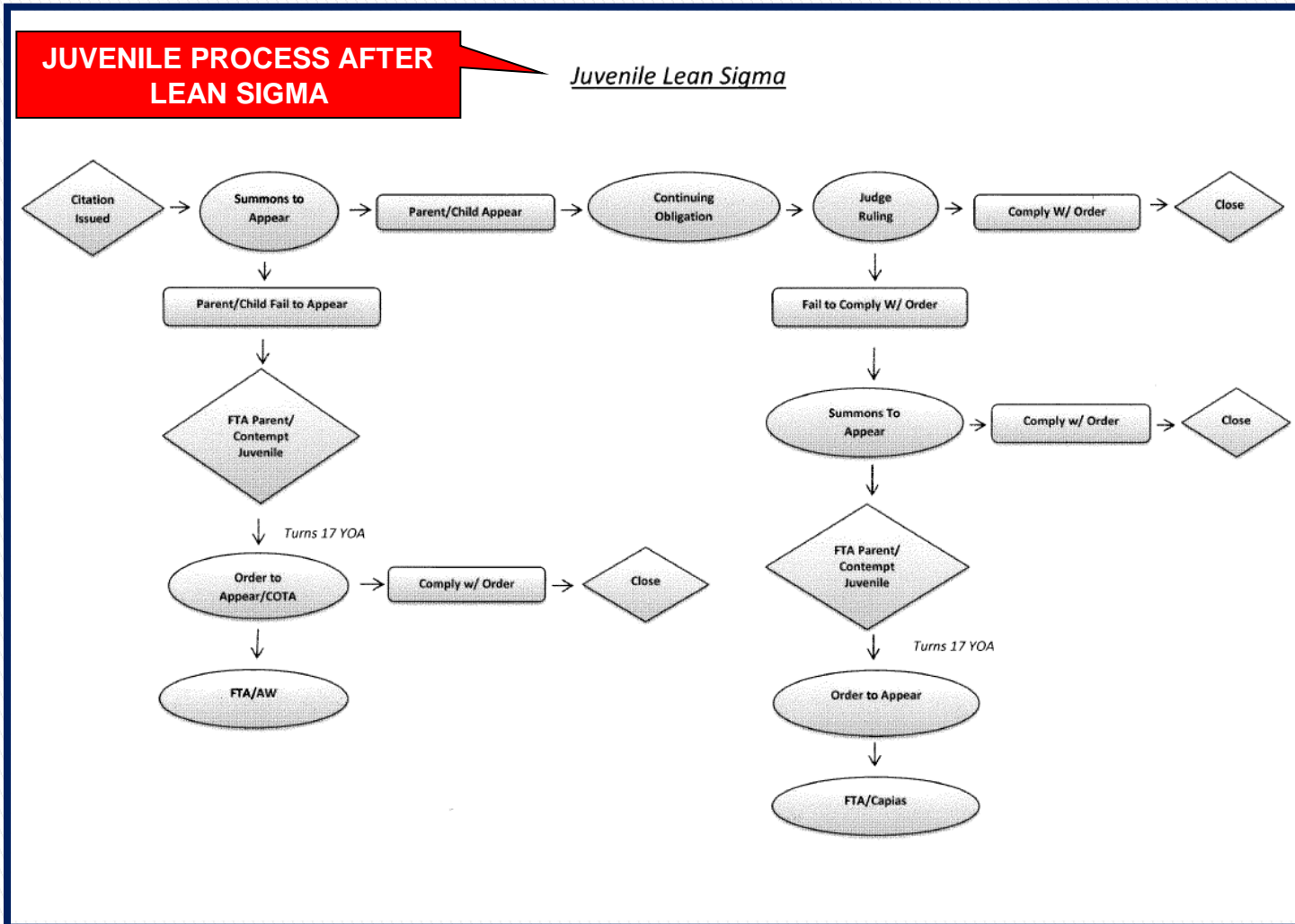
JUVENILE PROCEDURES

1. NEW TICKETS
 - a. SUMMONS TO PARENT AND CHILD
 - b. NEITHER SHOWS
 - i. FTA Parent (but not our current one – 45.057(e) / warrant
 - ii. Contempt Citation on Child
 - c. CHILD SHOWS / PARENT DOES NOT SHOW
 - i. FTA Parent (but not our current one – 45.057(e) / warrant
 - ii. COTA signed
 - iii. Reset
 - d. CHILD SHOWS / OTHER PARENT OR PERSON APPEARS
 - i. Judicial discretion on what to do about non-appearing parent
 - ii. If court can go forward with the person present, then the court should proceed to adjudicate the child.
 - iii. COTA signed
 - e. CHILD DOES NOT SHOW / PARENT SHOWS
 - i. Contempt Citation for child
 - ii. No COTA if parent doesn't know where child is
2. CHILD FAILS TO COMPLETE COURT ORDER – STILL UNDER 17 (PP OR PFY)
 - a. Show Cause to Child
 - b. Summons to parent
 - c. Basically treat any appearance / non-appearance like #1 above
3. CHILD NOW OVER 17
 - a. OLD TICKETS – NEVER APPEARED
 - i. Original Summons w/ 45.057(h) notice in file.
 - ii. SUMMONS (COTA) -- TO CHILD (now adult) ONLY
 - iii. CHILD FAILS TO APPEAR
 1. FTA (but this is not our current FTA) must be based on CCP 45.060(b)
 2. WARRANT ON FTA ONLY
 - b. OLD TICKETS – WITH APPEARANCE BUT STILL OUTSTANDING – non-completion
 - i. SHOW CAUSE
 - ii. FTA
 1. Contempt only



Analyze Phase

8. Determine Optimal Solutions



Analyze Phase

8. Determine Optimal Solutions



Juvenile FTA Complaint Updated by Legal

Failure to Appear (FTA)–
Summons issued to Parent, Managing Conservator, or Guardian with a Court Order to Appear at a Hearing with a Child
Code of Criminal Procedure Art. 45.057(e)(g) (Rev. 01/31/2012)

DOCKET NO. _____

IN THE MUNICIPAL COURT OF THE CITY OF TYLER, TEXAS

IN THE NAME AND BY THE AUTHORITY OF THE STATE OF TEXAS

BEFORE ME, the undersigned authority, on this day personally appeared _____, hereinafter called "complainant", who after being sworn says that said complainant has good reason to believe and does believe and charge that _____, hereinafter called "defendant", and before the filing of this complaint, within the Tyler city limits, Smith County, Texas, after the Court endorsed on a summons, issued to the defendant, a Court Order to appear personally at a hearing with the child at _____ M. in the Tyler Municipal Court on the _____ day of _____, A.D., 20____ and after the summons included a warning that the failure of the defendant to appear may result in arrest and is a Class "C" Misdemeanor offense; the defendant failed to appear in the Tyler Municipal Court when defendant was required to appear on the above described time and date stated in the summons ordered by the Court;
AGAINST THE PEACE AND DIGNITY OF THE STATE.

COMPLAINANT

This instrument was acknowledged before me on this the _____ day of _____, A.D.,
by _____.



Notary Public or Peace Officer
in and for the State of Texas

My Commission Expires: _____ Printed Name _____



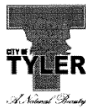
Improve Phase

9. Implement Improvements



Summons addressed to the defendant including the warning of a Failure to Appear.

Texas Code Criminal Procedure 45.057 (h).

**Municipal Court**
City of Tyler
PO BOX 895, TYLER, TX 75710
903.531.1266 (voice) ~ 903.531.1369 (fax)

SUMMONS

TO: CHILD SMITH, CHILD
ADDRESS
CITY, ST ZIP

REF: OFFENSE


YOU HAVE BEEN CHARGED WITH A CRIMINAL OFFENSE. PERSONS UNDER THE AGE OF 17 YEARS AT THE TIME OF THE COMMISSION OF AN OFFENSE ARE REQUIRED TO PERSONALLY APPEAR WITH A PARENT OR GUARDIAN TO ENTER A PLEA BEFORE THE COURT.

YOU ARE HEREBY COMMANDED TO APPEAR AS DIRECTED, TO-WIT:

DATE	TIME	OFFENSE CHARGED
APRIL 1, 2011	10:00 A.M.	OVERTIME PARKING

AT THE TYLER MUNICIPAL COURT, 813 N. BROADWAY, TYLER, TEXAS.

WARNING: FAILURE TO APPEAR ON THE DATE AND AT THE TIME ABOVE IS A CLASS "C" MISDEMEANOR OFFENSE (UP TO \$500.00 FINE). FURTHERMORE, YOUR FAILURE TO COMPLY WITH THIS SUMMONS IS PUNISHABLE BY CONTEMPT OF COURT (\$100.00 FINE AND/OR 3 DAYS IN JAIL). FAILURE TO APPEAR MAY RESULT IN THE SUSPENSION OR DENIAL OF A DRIVER'S LICENSE.


JUDGE PRESIDING

TEXAS CODE CRIMINAL PROCEDURE §45.057(h)

A child and parent required to appear before the court have an obligation to provide the court in writing with the current address and residence of the child. The obligation does not end when the child reaches age 17. On or before the seventh day after the date the child or parent changes residence, the child or parent shall notify the court of the current address in the manner directed by the court. A violation of this subsection may result in arrest and is a Class C misdemeanor. The obligation to provide notice terminates on discharge and satisfaction of the judgment or final disposition not requiring a finding of guilt.

Improve Phase

9. Implement Improvements



- New Procedures will take effect upon the juveniles 17th birthday.
- No warrants will be issued until after the juveniles 18th birthday.

Improve Phase

11. Improve State Performance



- Initial notices mailed to defendants (letters A through G).
- Hard Savings : \$6,950.34 paid to Court.
- Soft Savings : \$30,972.62 credit given for time served in jail (voluntary waivers signed by defendants).





Next Steps

- Continue implementation
- Develop procedural controls
- Monitor performance of new process
- Develop cost and savings spreadsheet

Reducing PMA Completion Time



Project Start: 11-3-2011

Project Revision: 1

Project Champion: Russ Jackson

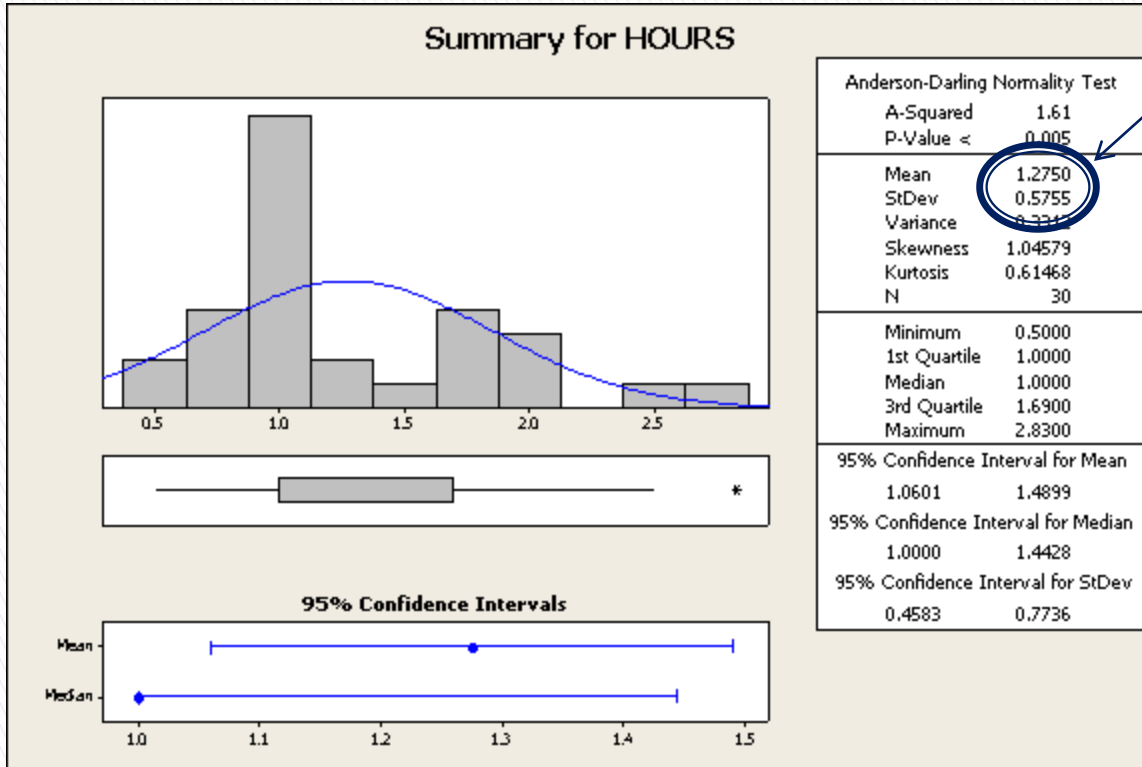
Black/Green Belt: Leroy Sparrow

Define Phase

1. Select Output Objective



Graphical Summary



On average, it is taking 1.27 hours to complete a PMA.

Define Phase

2. Define Performance Standard



Project Charter

Project Charter		
Project Authorization		
Organization:	Champion:	Process Owner:
City of Tyler	Russ Jackson	
Project:	Project #:	
Reduce Light Duty Vehicle PM Time		
Problem Statement:		
We are experiencing a problem with preventive maintenance time. The area where we are focusing is the light duty vehicle pma process, which is a basic oil and filter change. The magnitude of the problem indicates that we spend an average of 1.27 hours on a standard oil and filter change for light duty vehicles. The effect of not working efficiently is causing a decrease in light duty pma revenue. This inefficiency is also causing us to utilize an external vendor more frequently.		
Project Objective:		
The project objective is to standardize our process for light duty preventative maintenance.		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
893738	89373	
Approval Date:	Champion Signature:	Process Owner Signature:
Estimated Completion Date:	Project Leader:	Financial Analyst:
	Leroy Sparrow	

Problem Statement:
 We are experiencing a problem with preventive maintenance completion time. The area where we are focusing is the light duty vehicle PMA process, which is a basic oil and filter change. The magnitude of the problem indicates that we spend an average of 1.27 hours on a standard oil and filter change for light duty vehicles. The effect of not working efficiently is causing a decrease in light duty PMA revenue. This inefficiency is also causing us to utilize an external vendor more frequently.

Project Team			
Name	Role	Comments	Phone
Leroy Sparrow	Project Leader		
Russ Jackson	Champion		
Guillermo Garcia	Master Black Belt		
Dena Beard			
Debora Shreck			
Kerwin Barrett			
Lamar Hampton			
Larry Yarber			
Corey Wiggins			
Stan Stoffregen			

Measure Phase

4. Establish Baseline Process Capability



Capability Analysis

Attribute Capability

Confidence -->	0.95	Sample data is:	Confidence Interval is:	
Units -->	30	<input checked="" type="radio"/> Short Term	<input type="radio"/> One-sided	
Opportunities -->	1	<input type="radio"/> Long Term	<input checked="" type="radio"/> Two-sided	
TOP's -->	30			
Defects -->	12			

Short Term Capability

	p(d)	Percent	ppm	Cpk	Z		Defects	
Upper Limit on Failure Rate	0.5940	59.4%	593,965	-0.08	-0.24	<= "worst case" =>	18	95%
Nominal Value	0.4000	40.0%	400,000	0.08	0.25	<= "best estimate"	↑	Confidence
Lower Limit on Failure Rate	0.2266	22.7%	226,558	0.25	0.75	<= "best case" =>	7	Interval

Estimated Long Term Capability (shifted by 1.5 sigma)

	p(d)	Percent	ppm	Ppk	Z
Nominal Value	0.8937	89.4%	893,738	-0.42	-1.25

This shows that we are currently running this process at a .25 sigma level.

Measure Phase

5. Define the Performance Objectives



Project Objective

Goals and Benefits

Defect Levels/Goals:

	Date		DPMO(LT)	Zbench(ST)	Cpk
Baseline	1/17/2012		893738	0.25	0.08
Goal	1/17/2012		89373	0.47	0.15
Stretch Goal			0	0.00	0.00

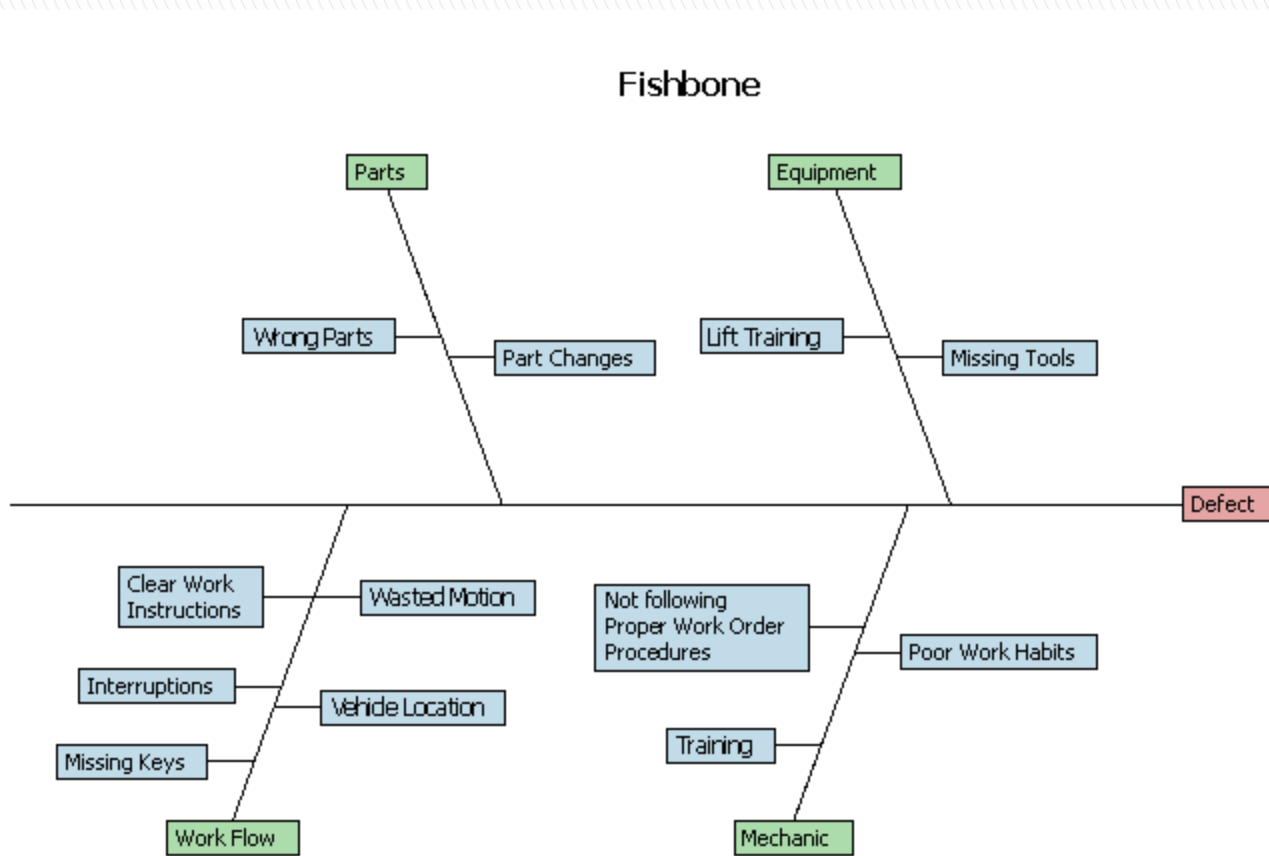
Project Objective is to reduce the DPMO (defect per million opportunities).

Measure Phase

6. Identify Sources of Variation



Fishbone Diagram



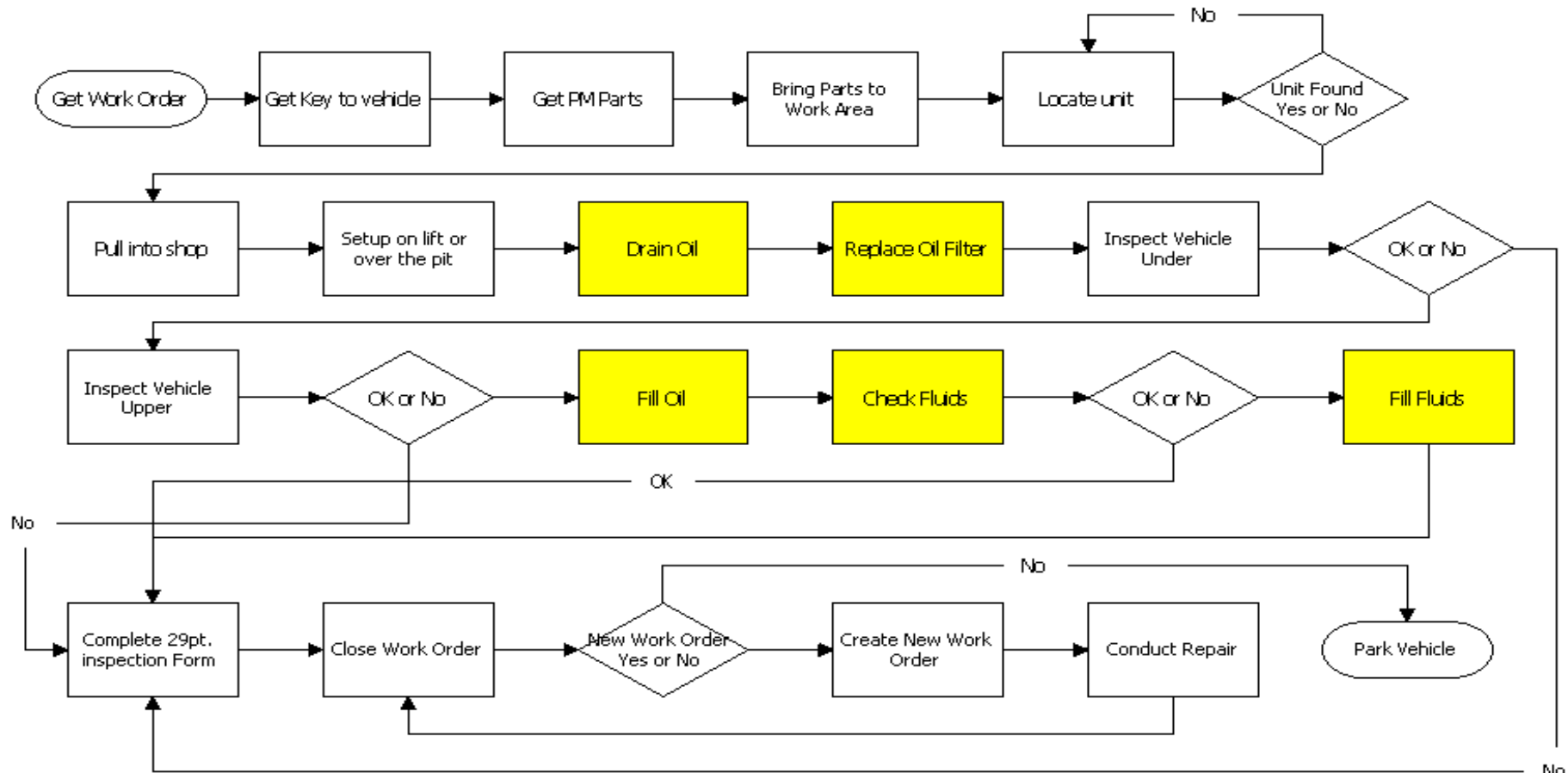
List of possible variables that extend Light Duty PMA completion times.

Measure Phase

6. Identify Sources of Variation



Process Map



Min

Measure Phase

6. Identify Sources of Variation



XY Diagram

YX Diagram Summary

Process:	Light Duty Preventative Maintenance
Date:	11/23/2011

Output Variables	
Description	Weight
PM HOURS	10

Input Variables	
Description	Ranking
Training	90
Poor Work Habits	82
Missing Tools	70
Wasted Motion	70
Lift Training	63
Work Instructions	63
Wrong Parts	57
Proper Work Order Procedures	55
Interruptions	50
Part Changes	50
Missing Keys	43
Vehicle Location	43

Analyze Phase

7. Screen Potential Causes



Process Measurement Sheet

Process Measurement Sheet		Process							Date:		Demand per Shift		8		
		Available Production Time Per Shift (Sec)				28800			Area:		Takt Time:		3600.0		
#	Element	1	2	3	4	5	6	7	8	9	10	Avg Time	Capability	Operators	
1	Get W/O, keys, and parts	120	120	120	360							180.00	160	0.05	
2	Locate unit and setup on lift	180	360	180	300							255.00	113	0.07	
3	Drain oil and replace filter	420	600	200	420							410.00	70	0.11	
4	Inspect vehicle (under)	360	480	240	600							420.00	69	0.12	
5	Inspect Vehicle(upper)	480	840	600	780							675.00	43	0.19	
6	Fill oil	180	360	300	180							255.00	113	0.07	
7	Check fluids and fill fluids	120	300	120	120							165.00	175	0.05	
8	Complete 29pt Inspection	180	60	60	120							105.00	274	0.03	
9	Close W/O	240	480	120	60							225.00	128	0.06	
10	Park vehicle	60	0	120	120							75.00	384	0.02	
11															
12															
13															
14															
15															
16															
17															
18															
											Totals	2765.00	10	0.77	

Page 1

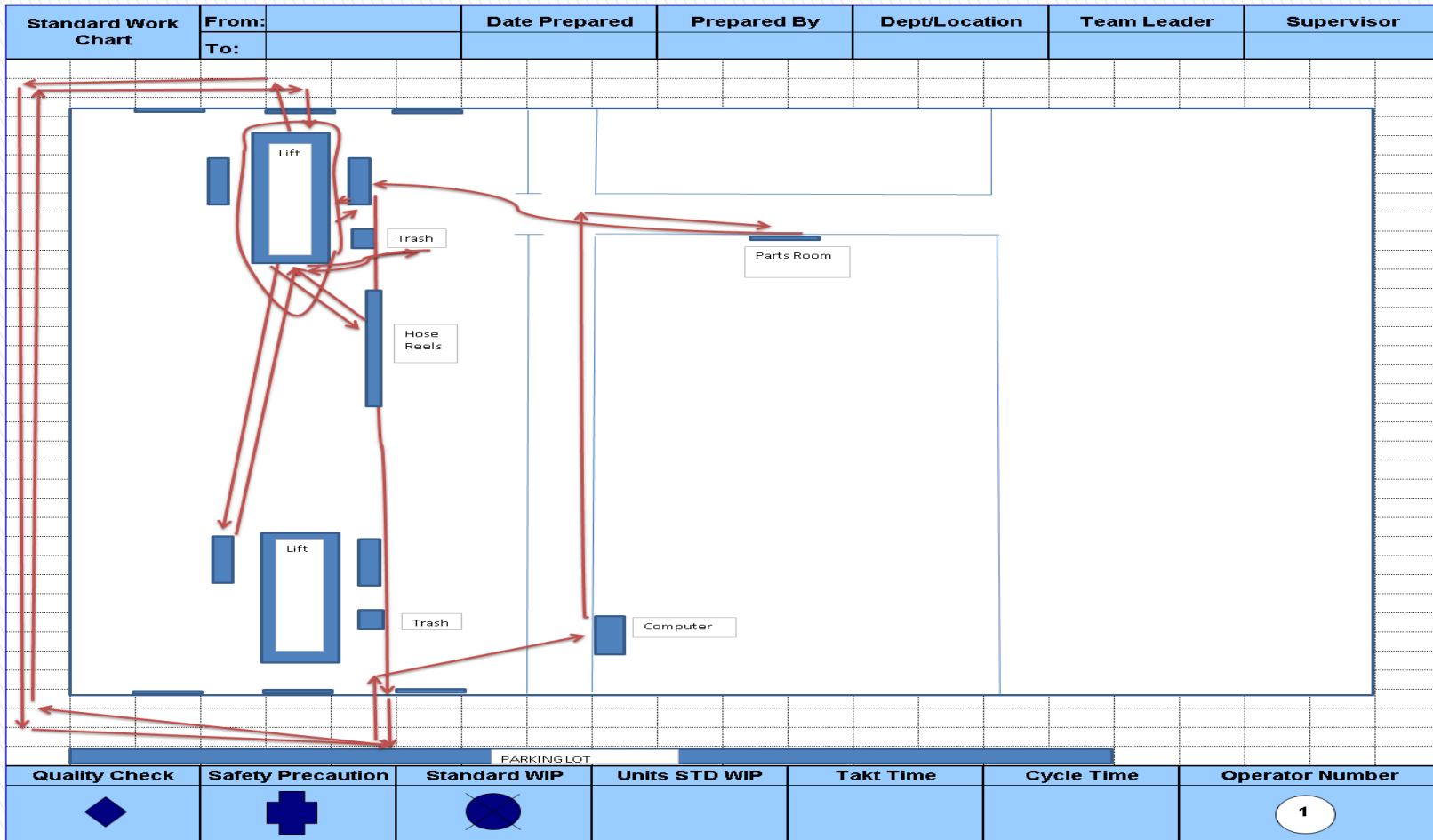
This shows an average of 46 minutes to complete a PMA.

Analyze Phase

7. Screen Potential Causes

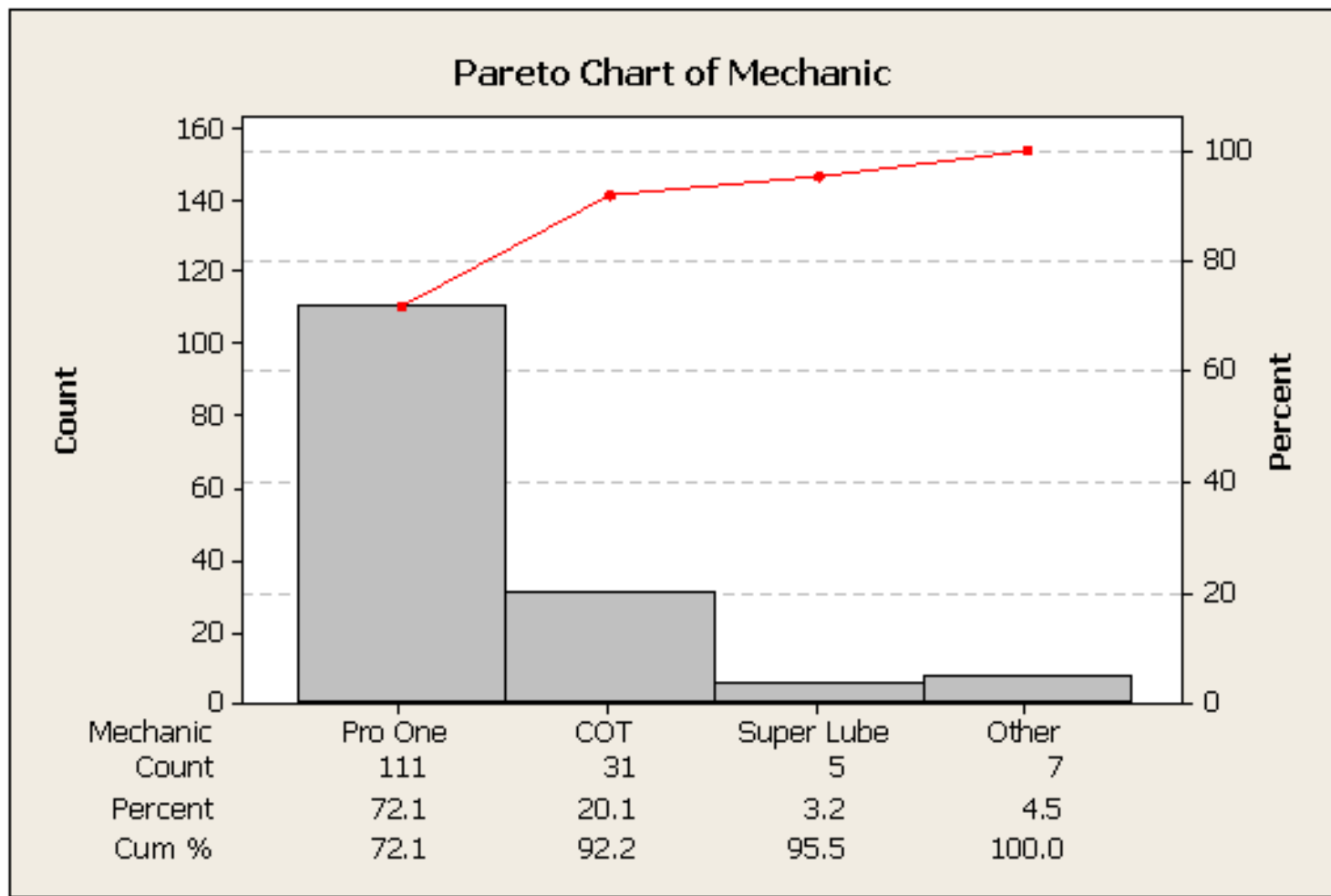


Spaghetti Diagram



Analyze Phase

7. Screen Potential Causes



Improve Phase

8. Optimal Solutions



- Create a Clear Work Instruction for the Light Duty PMA Process
- Create Mechanic Efficiency Reports
- 5S the Work Area

Improve Phase

9. Implement Improvements



Light Duty PMA Work Instruction

I. Purpose:		
Standardize and Clarify Light Duty PMA Process		
II. Scope:		
Light Duty PMA		
III. Definition:		
Light Duty PMA Process		
IV. Procedure:		
<ol style="list-style-type: none"> 1. Get work order, keys, and parts from the parts room and take to your work area. 2. Locate the unit, pull it into the shop and setup the unit on the lift. 3. Drain the oil and replace the oil filter. 4. Inspect items on the 29pt.inspection form that are under the vehicle. 5. Fill unit with the appropriate oil. 6. Complete the remaining items on the 29pt. inspection form. Any additional repairs or parts need to be listed on the 29pt. inspection form. 7. Close the PMA work order. 8. Open new work orders if additional repairs are needed. 9. If no additional repairs are needed park the unit. 10. Return keys to the parts room and turn in all paperwork to the service writer or supervisor. 		
Author Name:	Authorization Name:	Authorization Date:
Leroy Sparrow	Russ Jackson	6/29/12

Improve Phase

9. Implement Improvements



Mechanic Efficiency Report

Based on 40 hrs per week.			VES Employee								
Date	Budgeted Hours	Overtime	Vacation/ Holiday/ Special Project Hours	Total Adjusted Budget Hours	Hours from H T E Report	Credits/ Rework	Late Clock In	Shop Audit	Total Adjusted Hours Billed	Efficiency Rating	Notes
4/7/2012	28			28	21.25				21.25	76%	
4/14/2012	35	1		36	32.75	1.54			31.21	87%	
4/21/2012	34	3.5		37.5	28.53	3.66			24.87	66%	
4/28/2012	34	0.75		34.75	30.71				30.71	88%	

Improve Phase

9. Implement Improvements



New Capability Analysis

Attribute Capability

Confidence -->	0.95	Sample data is:	Confidence Interval is:
Units -->	112	<input type="radio"/> Short Term	<input type="radio"/> One-sided
Opportunities -->	1	<input checked="" type="radio"/> Long Term	<input checked="" type="radio"/> Two-sided
TOP's -->	112		
Defects -->	24		

Long Term Capability

	p(d)	Percent	ppm	Ppk	Z		Defects	
Upper Limit on Failure Rate	0.3019	30.2%	301,855	0.17	0.52	← "worst case" ⇒	34	95%
Nominal Value	0.2143	21.4%	214,286	0.26	0.79	← "best estimate"	↑ ↓	Confidence Interval
Lower Limit on Failure Rate	0.1424	14.2%	142,383	0.36	1.07	← "best case" ⇒		

Estimated Short Term Capability (shifted by 1.5 sigma)

	p(d)	Percent	ppm	Cpk	Z
Nominal Value	0.0110	1.1%	10,963	0.76	2.29

Control Phase

12. Implement Controls



Control Plan

Control Plan for Reducing Light Duty PMA Completion Time

Light Duty PMA Work Instructions

The work instructions for a PMA have been created and placed in a file for all employees to review. These work instructions will be reviewed with all employees to help standardize this process by providing clear and precise instructions on how to perform a light duty PMA.

Mechanic Efficiency Report

This report is used to communicate to the mechanics how productive and efficient they are performing. This report is reviewed on a monthly basis. If mechanics are showing a low trend on their efficiency report, then a supervisor will review this area with the mechanic.

PMA Data

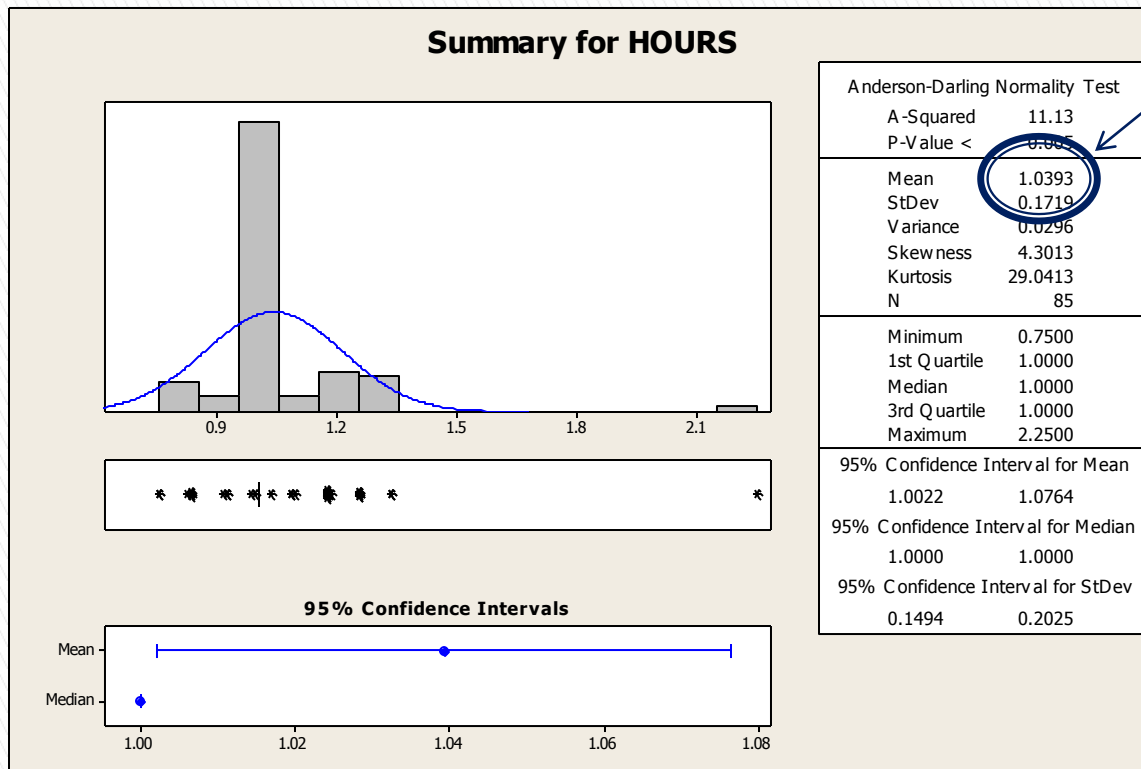
We will track the completion time for all light duty PMA's. Any mechanic that goes over the set goal of 1 hour is reviewed in detail.

Control Phase

12. Implement Controls



New Graphical Summary



Since project implementation, May and June data shows that our PMA average has dropped to 1.04 hours.



Savings Summary

Initial Cost	
Hard Savings	\$ 8,978
Soft Savings	\$ 2,787
Total Savings	\$ 11,764
Time Saved (Hrs)	55.73

Data				Hard Dollar Savings				Soft Dollar Calculations						Time Savings
Month	Completed Inspections	Avg Hours to complete PM	Vehicles to Vendor	Previous # of Vehicles sent to Vendor	Estimate Vendor Cost @ \$47.50	Current Vehicle Vendor Cost @	Hard Savings	Previous Days to Complete	Estimate Hours to complete PM	New Hours to complete PM	Time Difference	Labor Cost	Soft Savings	Time Saved (Hrs)
Apr-12	45	1.05	4	41	\$ 1,947.50	\$ 190.00	\$ 1,757.50	1.27	57.15	47.25	9.90	\$ 50.00	\$ 495	9.90
May-12	42	1.03	3	41	\$ 1,947.50	\$ 142.50	\$ 1,805.00	1.27	53.34	43.26	10.08	\$ 50.00	\$ 504	10.08
Jun-12	42	1.02	3	41	\$ 1,947.50	\$ 142.50	\$ 1,805.00	1.27	53.34	42.84	10.50	\$ 50.00	\$ 525	10.50
Jul-12	40	1.01	5	41	\$ 1,947.50	\$ 237.50	\$ 1,710.00	1.27	50.80	40.40	10.40	\$ 50.00	\$ 520	10.40
Aug-12	55	1.00	1	41	\$ 1,947.50	\$ 47.50	\$ 1,900.00	1.27	69.85	55.00	14.85	\$ 50.00	\$ 743	14.85
Sep-12				41				1.27				\$ 50.00		
Oct-12				41				1.27				\$ 50.00		
Nov-12				41				1.27				\$ 50.00		
Dec-12				41				1.27				\$ 50.00		
Jan-13				41				1.27				\$ 50.00		
Feb-13				41				1.27				\$ 50.00		
Mar-13				41				1.27				\$ 50.00		
Apr-13				41				1.27				\$ 50.00		

Next Steps



- Continue to Track Data
- Identify any additional Improvements
- Track both Hard and Soft Savings

Define Phase

1. Select Output Characteristic



As of September 1, 2011, anyone performing code enforcement in the Fire Department must be a TCFP certified inspector.



H.B. No. 3866

SECTION 1. Subchapter Z, Chapter 419, Government Code, is amended by adding Section 419.908 to read as follows:

Sec. 419.908. FIRE SAFETY INSPECTIONS. (a) Only an individual certified by the commission as a fire inspector may conduct a fire safety inspection required by a state or local law, rule, regulation, or ordinance.

Define Phase

2. Defect Definition



Project Charter

Due to recent changes in State law, our fire inspection program must be adjusted and updated to maintain compliance.

Project Charter

Project Authorization

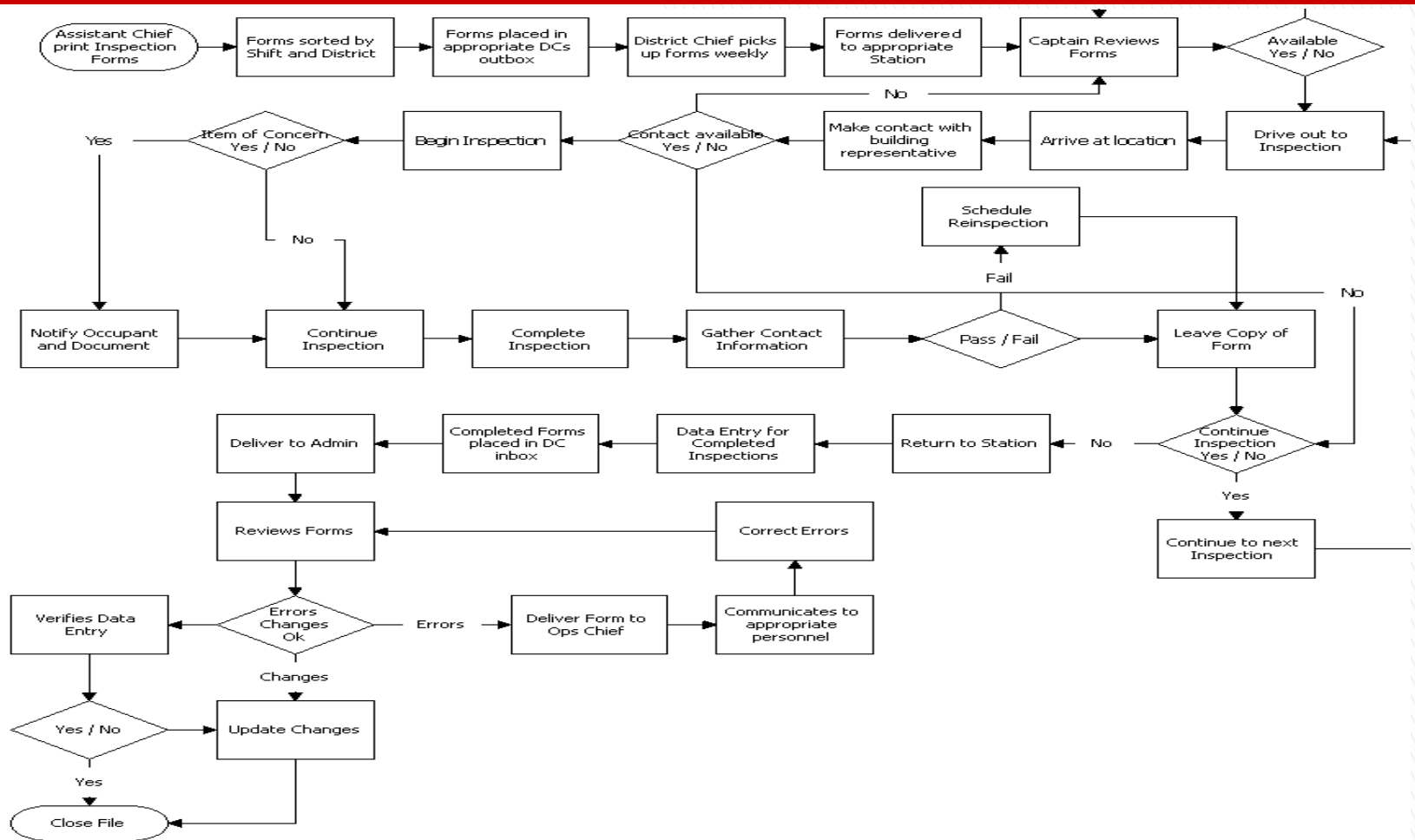
Organization: Fire Department	Champion: Tim Johnson	Process Owner:
Project: Fire Department Inspection and Pre-Fire Planning Program	Project #:	
Problem Statement: The existing inspection program within the Suppression Division requires evaluation and implementation of updates based on recent changes in State law. In addition, there is a low level of employee buy-in, with minimal benefit to the individual employees conducting the work.		
Project Objective: Develop a plan and implement a program that increases efficiency with the scheduling and execution of inspections and pre-fire planning of businesses within the individual station districts. In doing so, we should experience the benefits of both time savings and cost savings within the department, while also improving employee participation.		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
Approval Date:	Champion Signature:	Process Owner Signature:
Estimated Completion Date:	Project Leader: Paul Findley	Financial Analyst:

Project Team

Name	Role	Comments	Phone
Tim Johnson	Project Champion		903-535-0005
Paul Findley	Project Leader		903-535-0007
Brandon Davis			903-535-0007
Laura Mason			903-535-0007
Marjorie Vallejo			903-535-0007
James Pike			903-535-0005

Measure Phase

6. Identify Sources of Variation



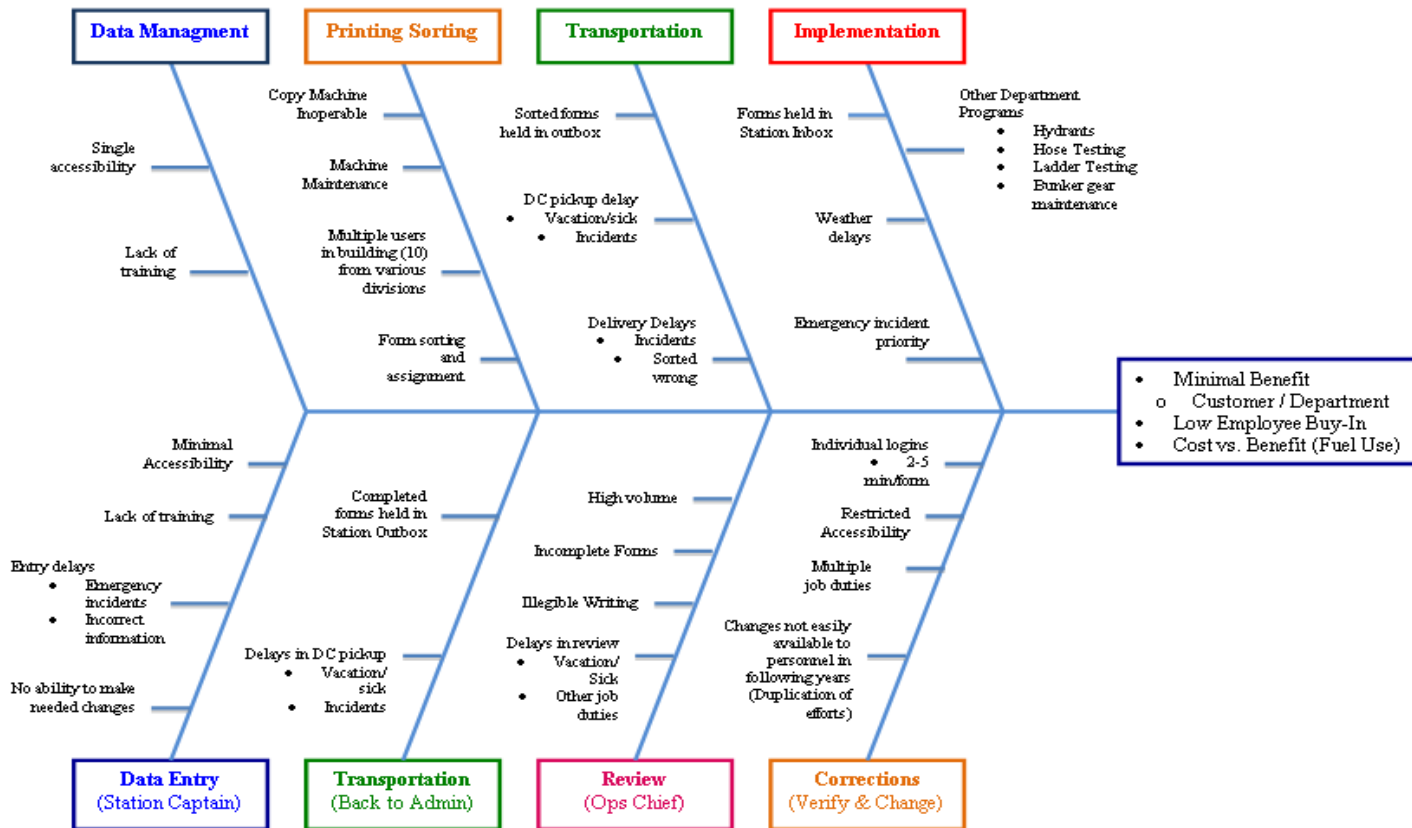
The current process map includes several non-value added steps. These “time traps” are causing delays and further complicating the process.

Measure Phase

6. Identify Sources of Variation



Title: Cause and Effect Diagram (Fire Inspection Process: Suppression Division)



Measure Phase

6. Identify Sources of Variation



YX Diagram Summary

Process:	Fire Safety Inspections
Date:	12/1/2011

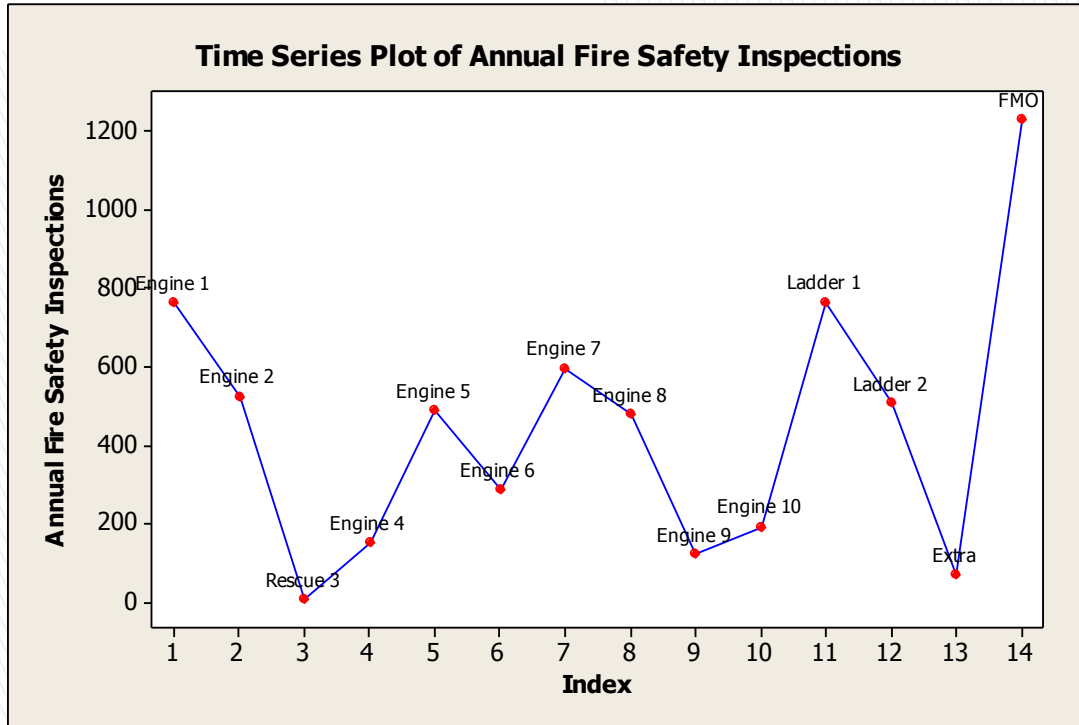
Output Variables	
Description	Weight
Timely Completion	5
Accurate Data	9
Increased FF Knowledge	7

Input Variables	
Description	Ranking
Lack of Training	159
Inability to make data changes	121
Documentation	117
Unable to locate property mngr	91
Addt. Monthly FD Training	65
Additional FD Program	65
Emergency Incidents	61
Machine malfunction	31
Vacations	31
Personnel Sick	31

These are the factors that were identified when evaluating the previous program. We plan to take these into consideration as we continue to develop and implement the new program.

Analyze Phase

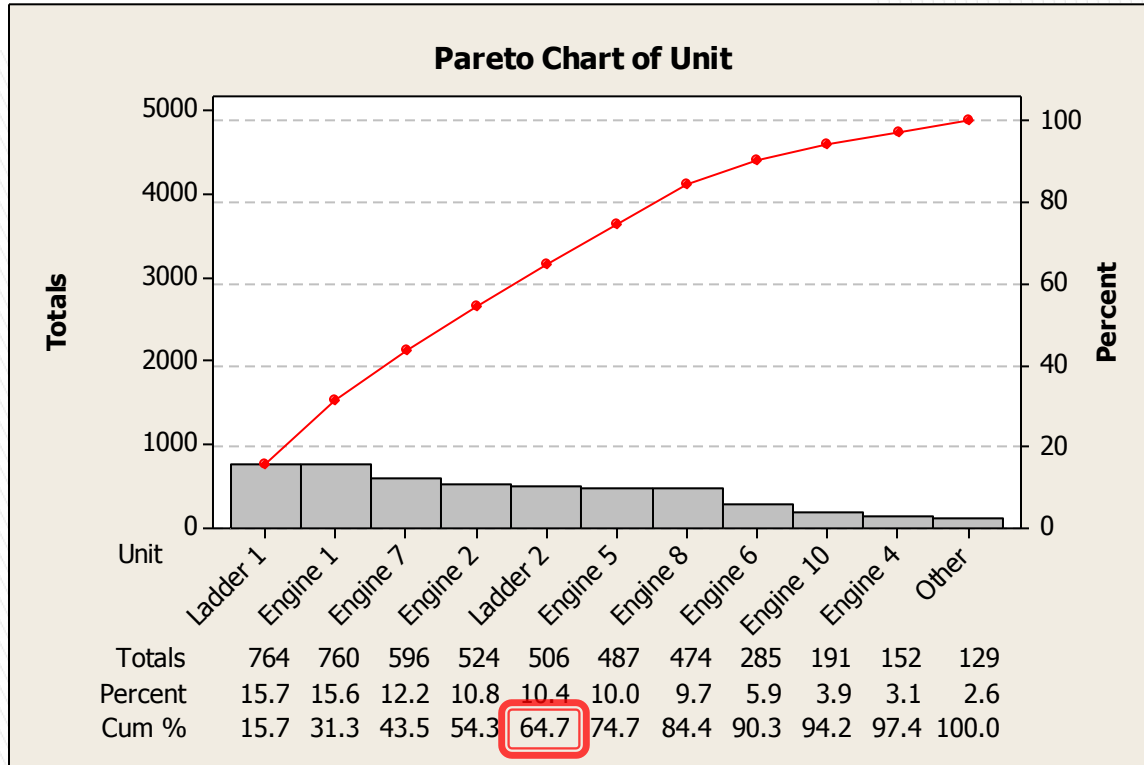
7. Identify Potential Variables



This chart depicts the overall inspection frequencies, sorted by individual units.

Analyze Phase

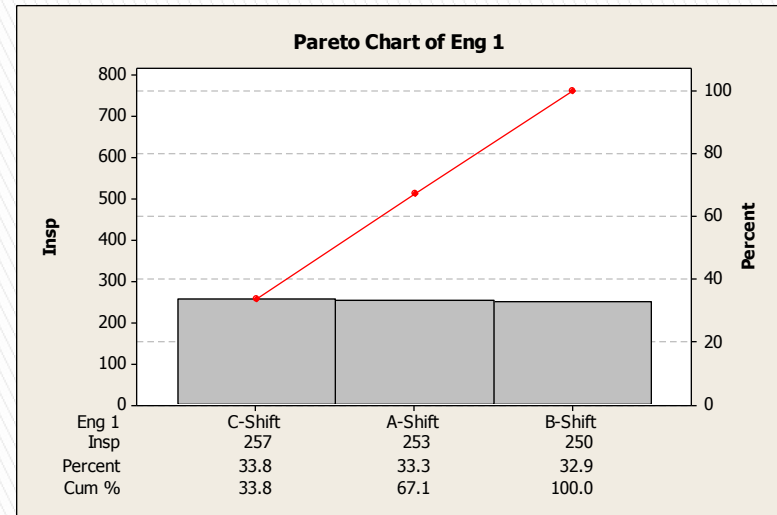
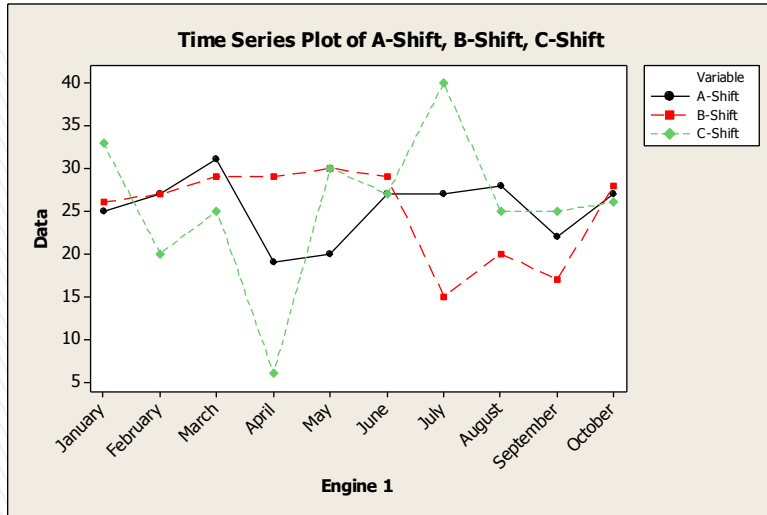
7. Identify Potential Variables



If we consider the totals for the busiest five units, there are three stations completing almost 65% of the inspections.

Analyze Phase

7. Identify Potential Variables



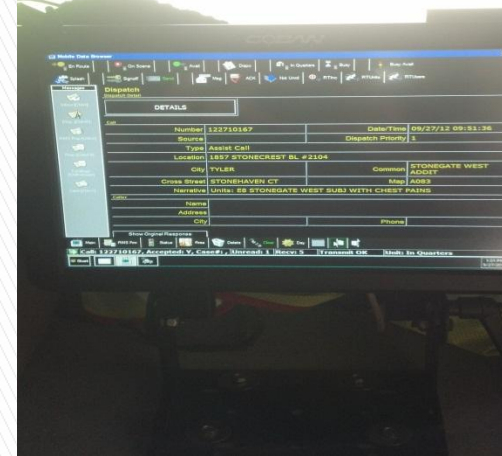
While there is some normalcy between the inspection numbers among the various shifts, we did identify some inconsistencies when analyzing each shift's monthly workload.

Analyze Phase

7. Identify Potential Variables



Property Address	Property Name	Property Number	Last Inspection Date
1220 ABERDEEN DR, TYLER	TYLER ALPHA CORP	620-0-0	3/21/2011
2336 ABERDEEN DR, TYLER	MATTHEW PROSSER, DDS	718-0-0	5/18/2011
4302 ABERDEEN DR, TYLER	PRIVATE RESIDENCE	626-0-0	9/19/2010
1414 AZULOMY AVE, TYLER	NEW DAY CHRISTIAN ACADEMY	927-0-0	10/18/2008
1700 ADAIR ST, TYLER	TFC SATELLITE PHYSICAL PLANT	4407-0-0	6/06/2012
1761 ADAIR ST, TYLER	TFC MECHANICAL WARE HOUSE	4325-0-0	6/06/2012
231 ADAMS AVE, TYLER	BROOKSHIRE'S CONSTRUCTION	628-0-0	5/25/2011
150 AIRPORT DR, TYLER	TYLER POLICE FIELD	2797-0-0	10/24/2011
150 AIRPORT DR, A, TYLER	HISTORIC TYLER TOWN MUSEUM	2797-0-1	9/22/2009
150 AIRPORT DR, TYLER	SKYLINE CAFE	2797-0-2	4/15/2010
110 W ANKERST ST, TYLER	GLIDDEN PAINTS	836-0-0	4/21/2010
114 E ANKERST ST, TYLER	SALER APARTMENTS	4300-0-0	4/21/2010
118 W ANKERST ST, TYLER	GLIDDEN PAINTS	637-0-0	4/19/2004
126 W ANKERST ST, TYLER	REGENCY CLEANERS	4305-0-0	4/21/2010
128 W ANKERST ST, TYLER	REGENCY CLEANERS	628-0-0	4/21/2010
126 W ANKERST ST, TYLER	VACANT	836-0-0	4/21/2010
200 E ANKERST ST, TYLER	EMER. SHUTTING AND PVE	628-0-0	4/21/2010
224 E ANKERST ST, TYLER	HAMPTON COURT APTS.	3514-0-0	4/21/2010
225 E ANKERST ST, B, TYLER	CARDIOVASCULAR ASSOC.	830-2-0	4/21/2010
225 E ANKERST ST, C, TYLER	VACANT	830-3-0	4/21/2010
225 E ANKERST ST, TYLER	COMMON AREAS	830-0-0	4/21/2010
225 E ANKERST ST, A, TYLER	VACANT	830-1-0	4/21/2010
225 E ANKERST ST, E, TYLER	REX PRO MARY, INC.	630-0-1	4/21/2010
225 E ANKERST ST, D, TYLER	BARTCHER CHiropractic	830-2-2	830-0-0
601 E ANKERST ST, TYLER	SOUTHERN OAKS BAPTIST CHURCH	626-0-0	1/02/2011
3409 ANCKER DR, TYLER		4652-0-0	
3205 ANDY LN, TYLER	WENDEE BERRY FOSTER HOME	3070-0-0	1/21/2009
2000 ANTHONY DR, TYLER	OVERHEAD DOOR CO.	445-0-0	1/22/2010
2004 ANTHONY DR, TYLER	OVERHEAD DOOR CO OF TEX	453-0-0	2/18/2010
2008 ANTHONY DR, TYLER	OVERHEAD DOOR	445-0-0	1/22/2010
2007 ANTHONY DR, TYLER	VACANT	465-0-0	1/22/2010
2011 ANTHONY DR, TYLER		5602-0-0	
2013 ANTHONY DR, TYLER	CONAN BUILDING	5013-0-0	1/22/2010
2012 ANTHONY DR, TYLER	COMMON AREAS / 2ND FLOOR	5020-0-0	1/22/2010



Our initial attempt to consolidate the pre-incident planning program with HTE experienced some challenges, and while our long-term goal remains the same, we have not fully been able to develop a system through HTE at this point. This remains an opportunity that we intend to explore as the program progresses.

Analyze Phase

7. Identify Potential Variables

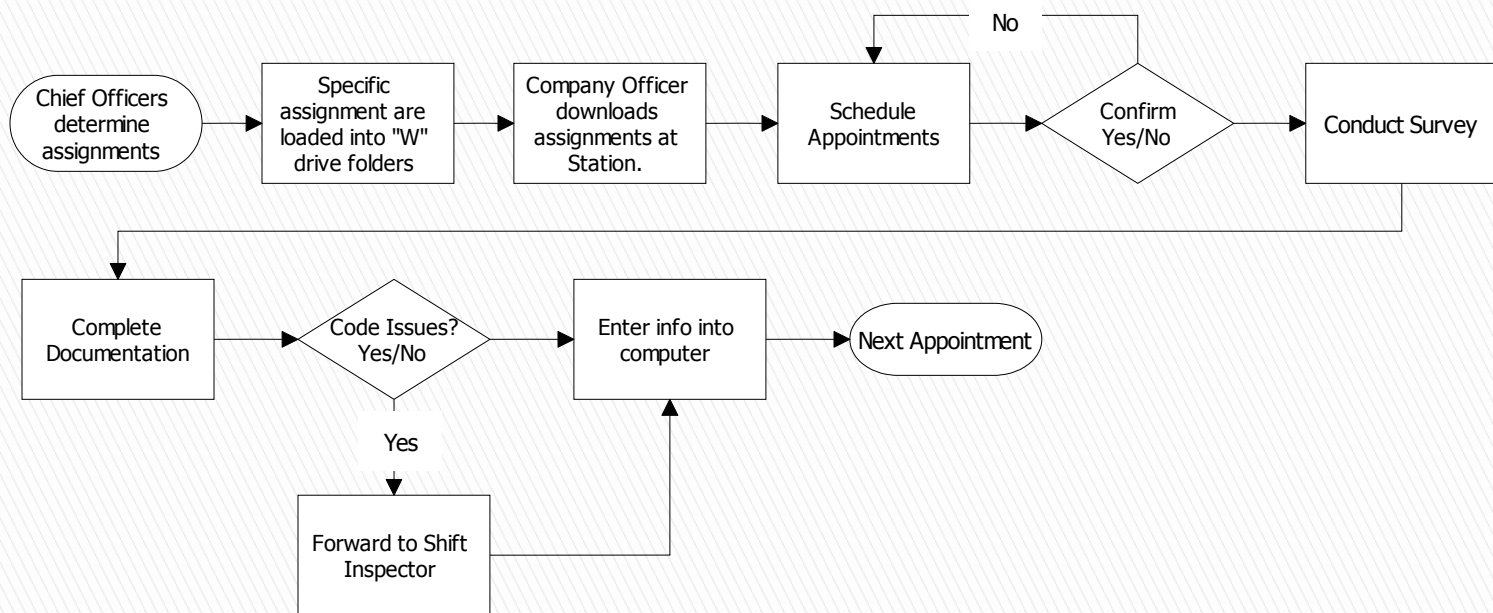


We met with various regulatory agencies in Austin regarding the impact of recent changes in the law. Questions still remain, yet it helped us to clarify what we could do as a department. Hence, the creation and implementation of this new program.



Improve Phase

8. Determine Optimal Solution



Streamlined Process Map

Improve Phase

8. Determine Optimal Solution



TYLER FIRE DEPARTMENT Page 1 of 4
Pre-Incident Plan Building Survey

Class: _____ Date: ____ / ____ / ____

Address/Building Name: **Fire Admin**

Address _____ Phone: ____ - ____ - ____

Emergency Contact 1: _____ Phone: ____ - ____ - ____

Emergency Contact 2: _____ Phone: ____ - ____ - ____

OCCUPANCY TYPE

Assembly Educational Health Care Detention/Correctional
 Residential Apartments Residential Board & Care Retail/Office/Business
 Industrial Warehouse/Storage

BUILDING CONSTRUCTION

Building Dimensions: Length: ____ Width: ____ Height: ____ Number of floors: ____

Construction Type: I II III IV V Exterior Walls: Metal Wood Concrete Brick Stone

Roof Construction

Roof Supports: Wood Metal Wood Steel Other
Truss Truss Joist Joist

Roof Decking Material: Wood Metal Concrete Other

Roof Covering: _____

Shape or Configuration: _____

Roof Attachments: Signs HVAC Other

Floor Construction

Floor Supports: Wood Metal Wood Steel Other
Truss Truss Joist Joist

Floor Decking Material: Wood Metal Concrete Other

Ceiling: Suspended Wood Other

Interior Wall Coverings: Sheetrock Plaster Concrete Brick Metal Other

Basement: Size: ____ x ____ x ____ ft entry point: _____
Basement Length Width Height

Click to add footer

This new form is now available to personnel in an electronic format and will be available for personnel in the field for use during emergency and non-emergency incidents.

Improve Phase

8. Determine Optimal Solution



Initial training has been completed this week (9-27-2012). Ongoing training will follow as the program continues. The initial pilot program is somewhat smaller in scope, as this will allow for feedback from the field. This feedback will be evaluated and incorporated into the final program.





- Evaluate pilot program
- Follow-up training
- Continue to explore further consolidation between the program and HTE
- Monitor effectiveness
- Finalize procedure

Improve process DNR work orders



Project Start:10-28-2011

Project Revision:1

Project Champion: Jim Yanker

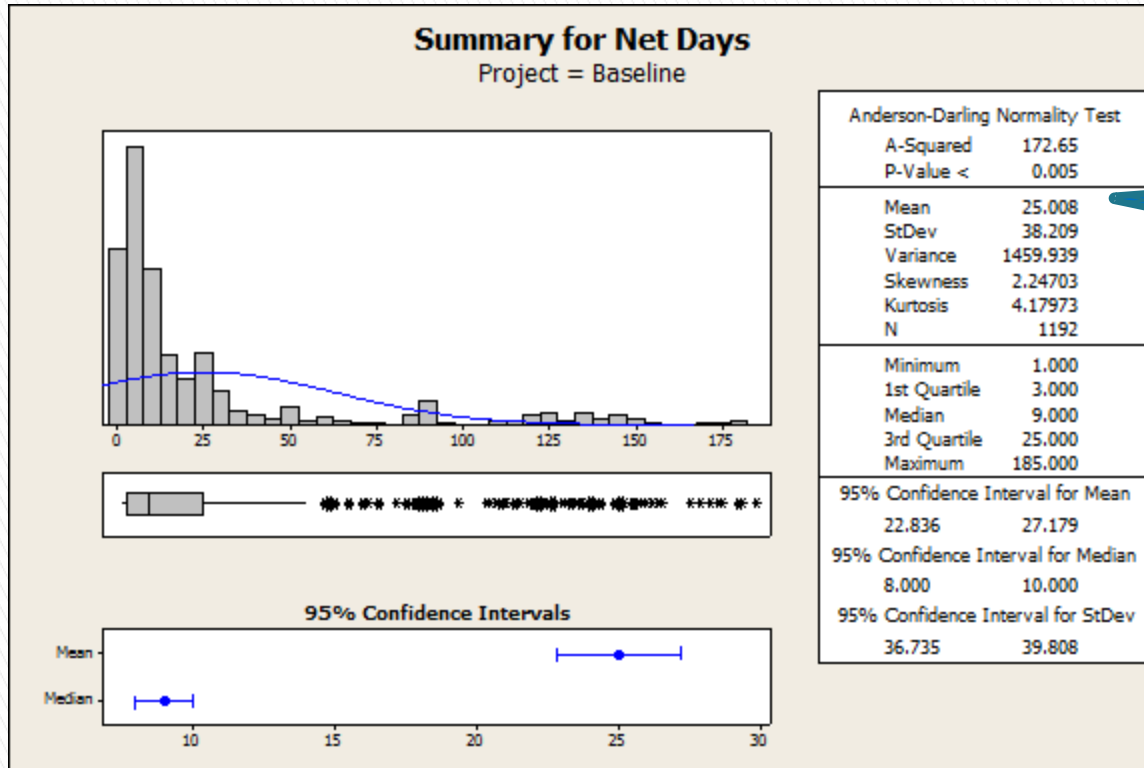
Black/Green Belt: Guillermo Garica

Define Phase

1. Select Output Characteristics



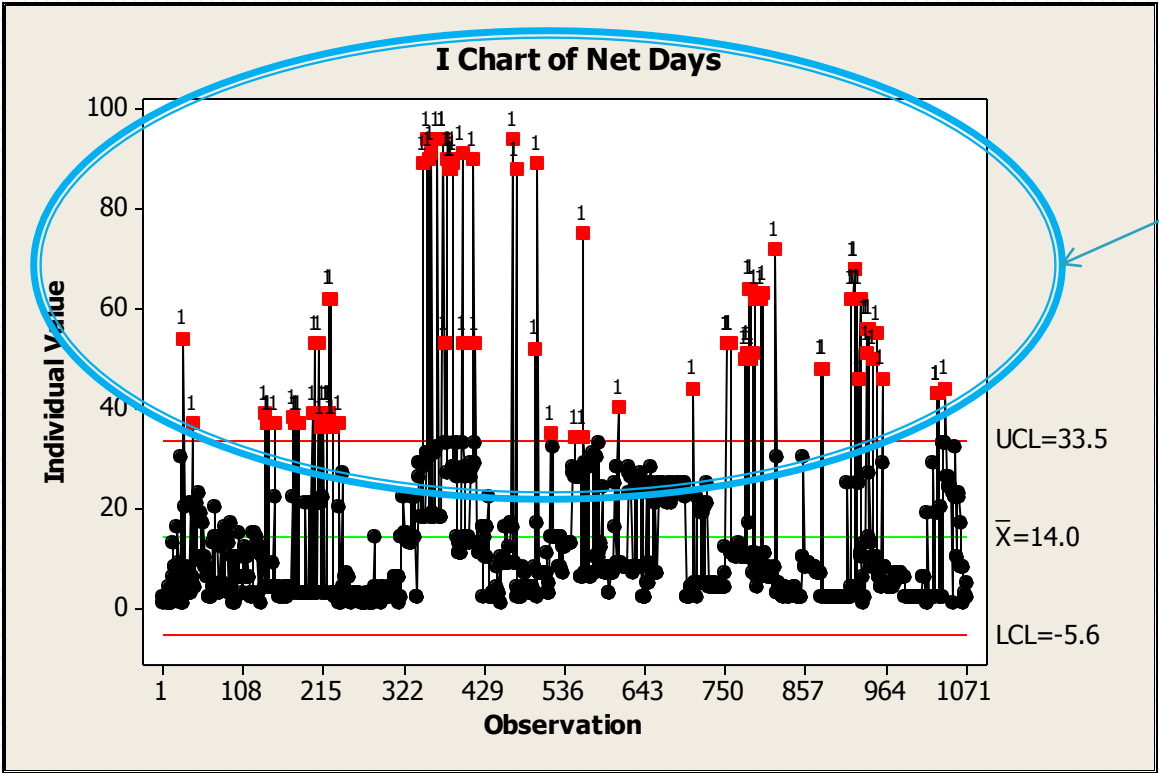
Graphical Summary



Average 25 days to closed

Define Phase

1. Select Output Objective



These are the ones that took more than 33 days to close.

Define Phase

2. Define Performance Standard



Project Charter		
Project Authorization		
Organization:	Champion:	Process Owner:
City Of Tyler	Jim Yanker	Joan Roberson
Project:	Project #:	
Improve Process DNR Work Orders		
Problem Statement:		
As the Water Department, we are experiencing a problem in closure of do not register work orders. The current average is 25 days to close the work order and the expected performance should be five days. The effect this is having is causing a potential lost in revenue as evidence by the three month total of \$136,579 of revenue or \$409,737.		
Project Objective:		
Reduce the processing of the work order to within 5 days.		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
922542 ppm		
Approval Date:	Champion Signature:	Process Owner Signature:
Estimated Completion Date:	Project Leader:	Financial Analyst:
	Rachel Tiger	

The starting average is 25 days. The goal is to reduce time to 5 days.

Measure Phase

4. Establish Baseline Capability



Attribute Capability

Confidence -> **0.95**
 Units -> **1,071**
 Opportunities -> **1**
 TOP's -> **1,071**
 Defects -> **653**

Sample data is:
 Short Term
 Long Term

Confidence Interval is:
 One-sided
 Two-sided

Page 1

Long Term Capability

	p(d)	Percent	ppm	Ppk	Z		Defects	
Upper Limit on Failure Rate	0.6391	63.9%	639,057	-0.12	-0.36	<= "worst case"=>	684	95%
Nominal Value	0.6097	61.0%	609,711	-0.09	-0.28	<= "best estimate"	↕ Confidence Interval	
Lower Limit on Failure Rate	0.5798	58.0%	579,760	-0.07	-0.20	<= "best case"=>		621

Estimated Short Term Capability (shifted by 1.5 sigma)

	p(d)	Percent	ppm	Cpk	Z
Nominal Value	0.1110	11.1%	110,961	0.41	1.22

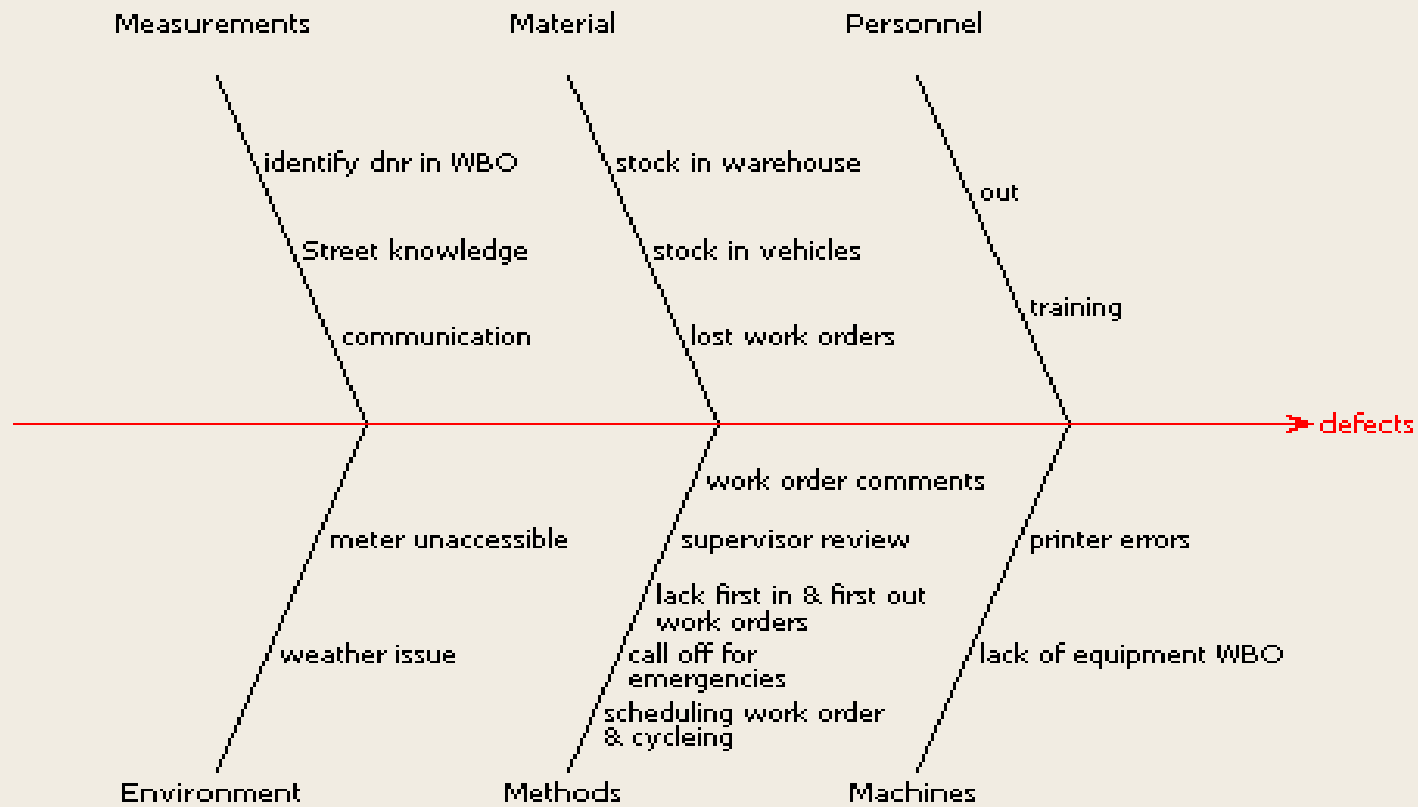
61% of the work was being closed after 5 days.

Measure Phase

6. Identify Variation Sources



Cause-and-Effect Diagram

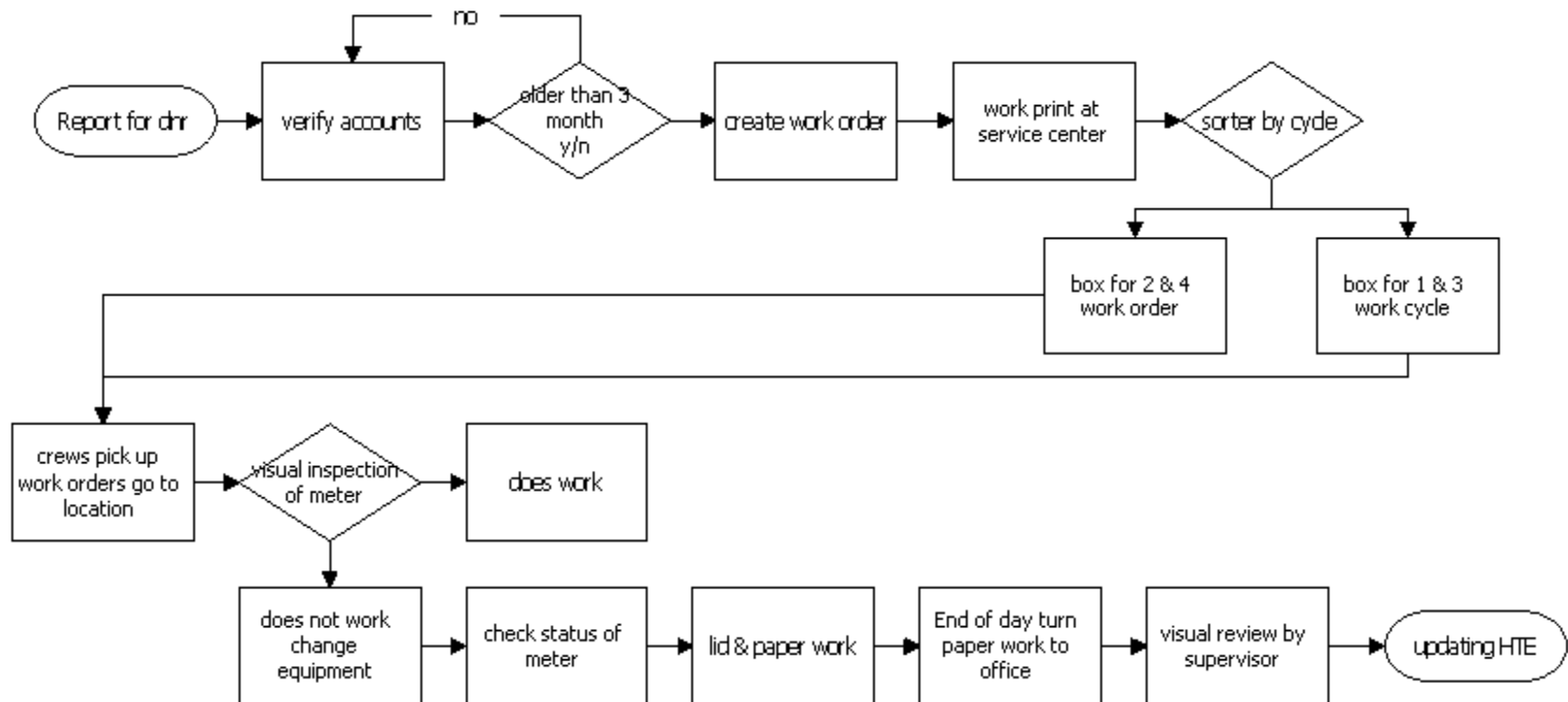


Measure Phase

6. Identify Variation Sources



Process Map



Analyze Phase

6. Select Output Objective



To help with the flow for the Service Center.

1. WBO guys go out to look at the meters first
2. Communicate what cycle is being worked on
3. Give the Work Orders to the Service Center when they are working on that Cycle

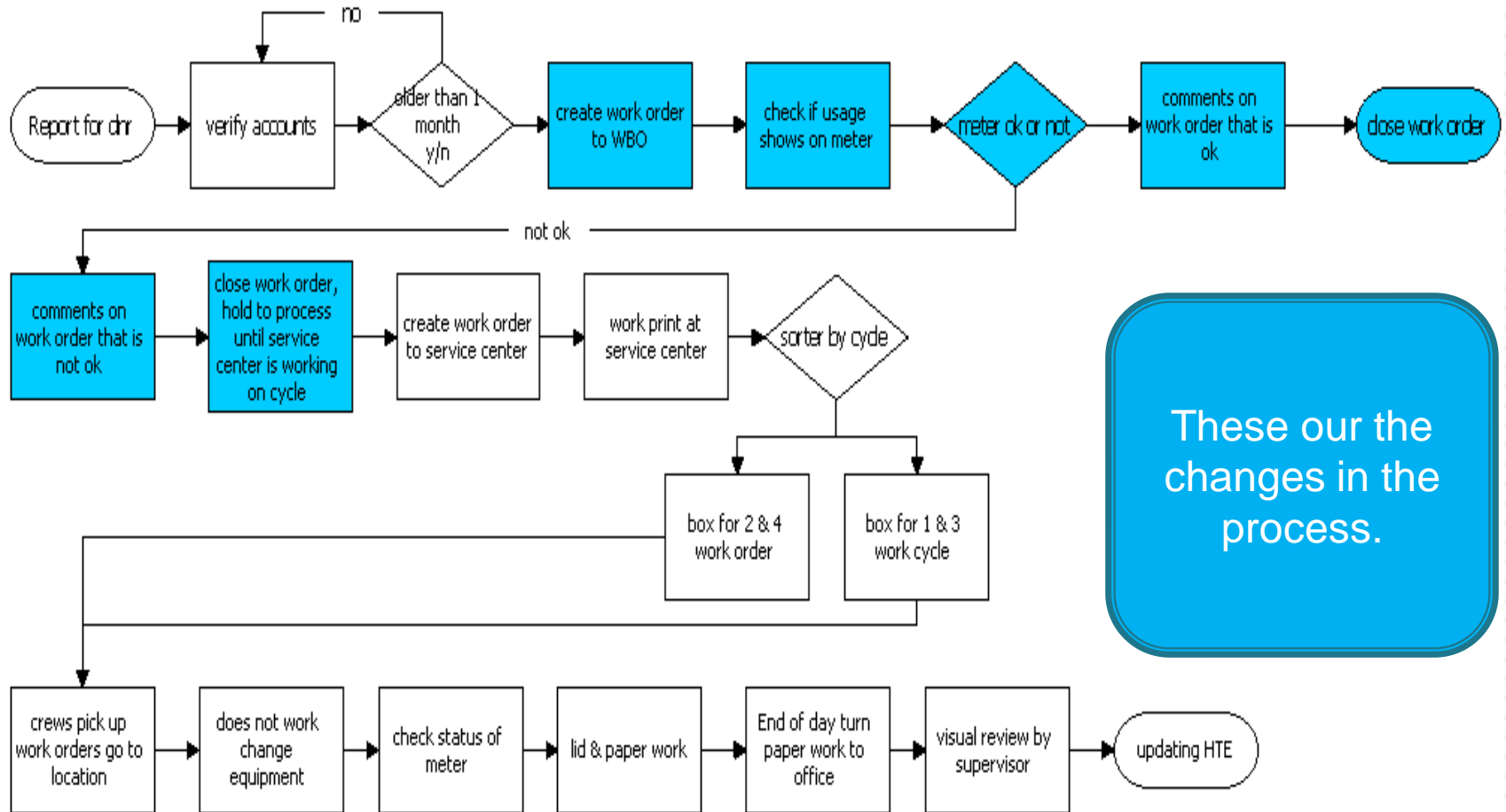


Improve Phase

9. Implement Improvements



Improve Process Map



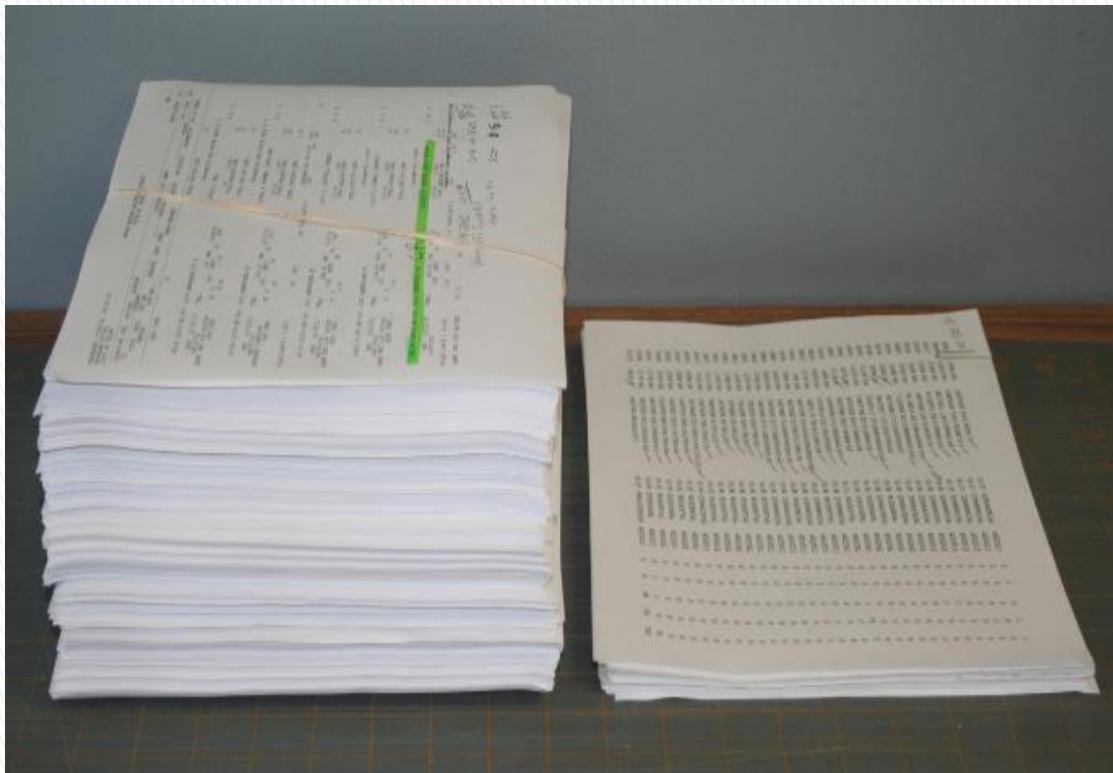
These our the changes in the process.

Improve Phase

9. Implement Improvements



This is the difference between the 2 reports that WBO goes through to do a work orders to check for dnr.

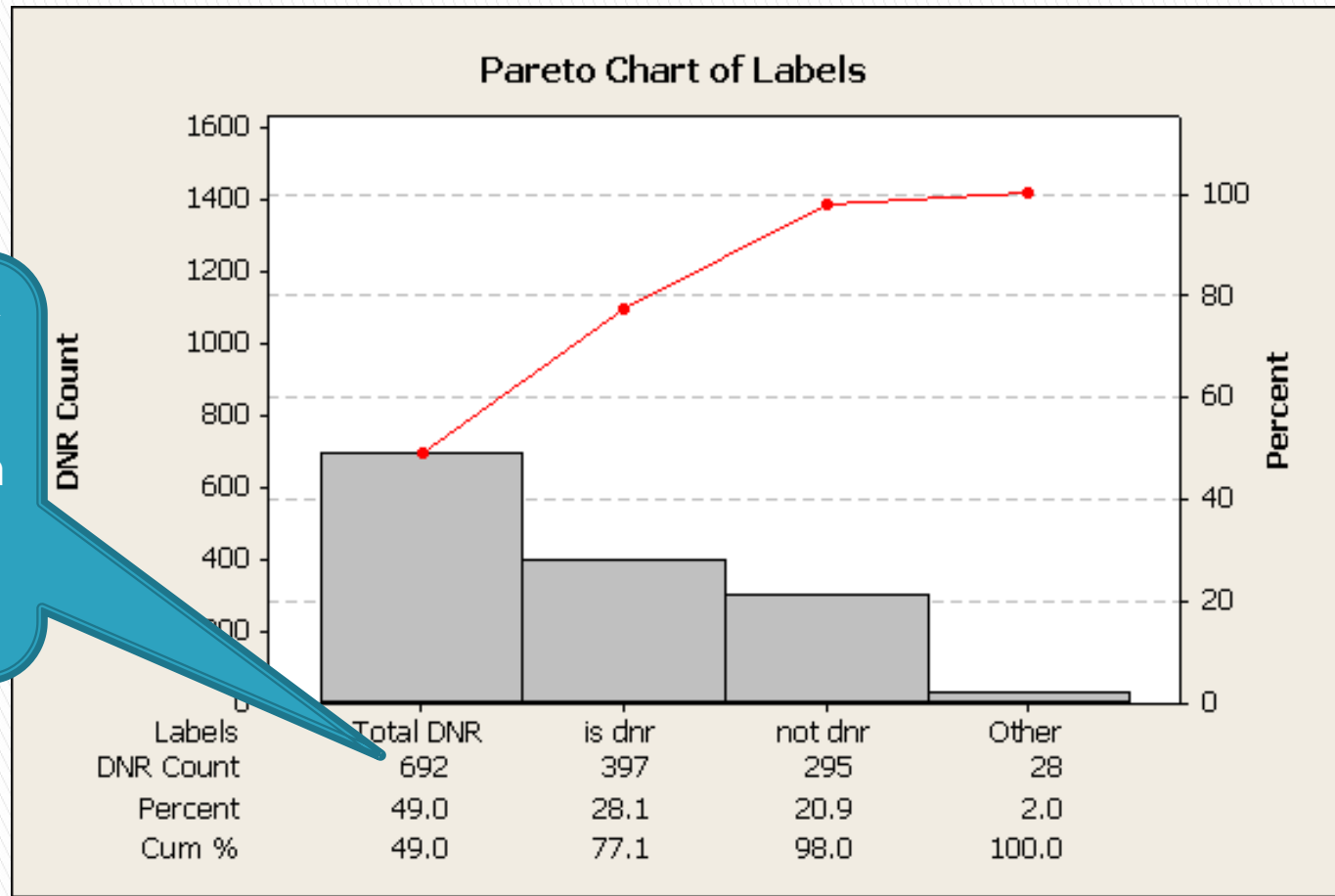


Improve Phase

9. Implement Improvements

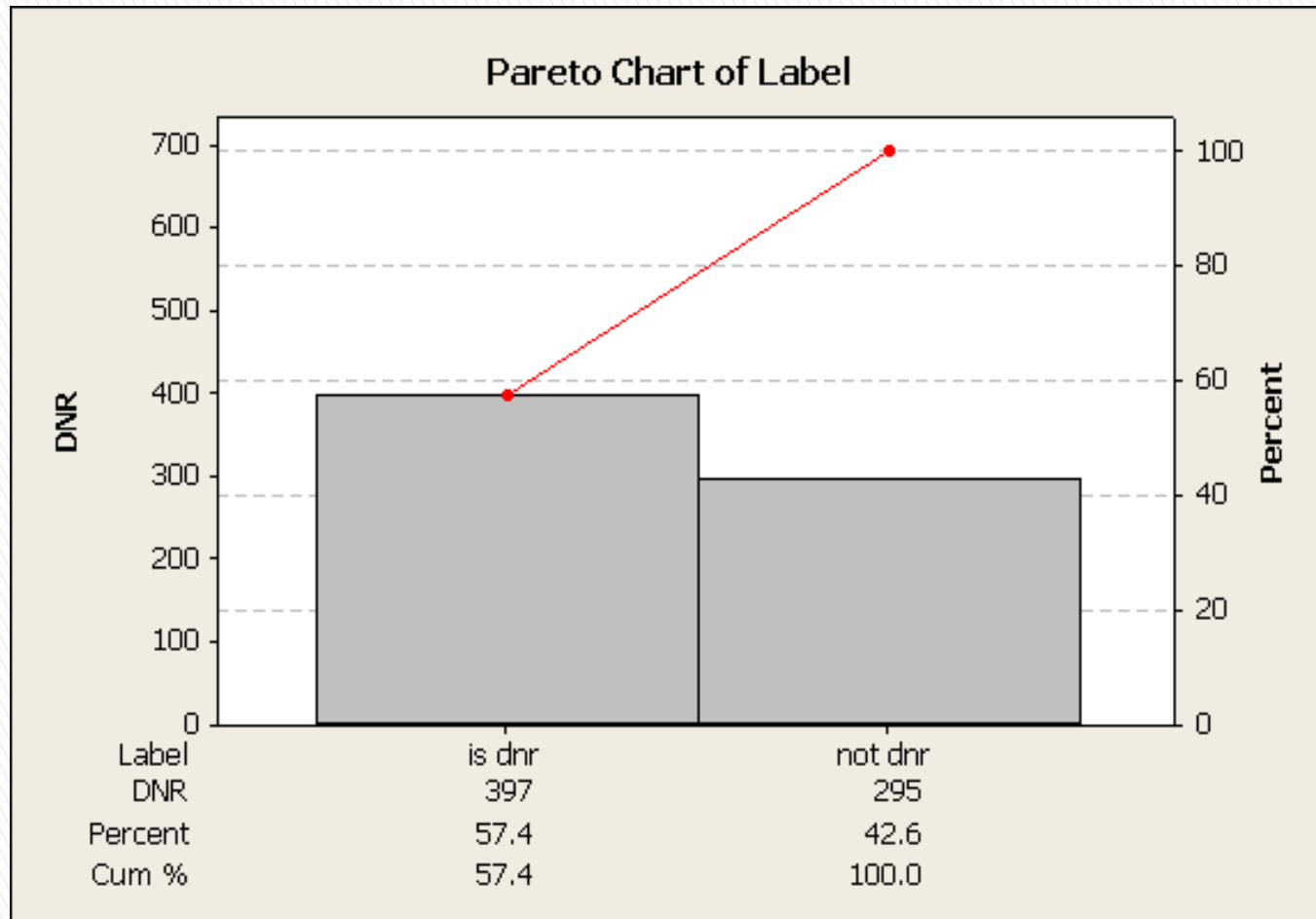


Total of DNR that have been done at WBO from December to January 2012.



Improve Phase

9. Implement Improvements



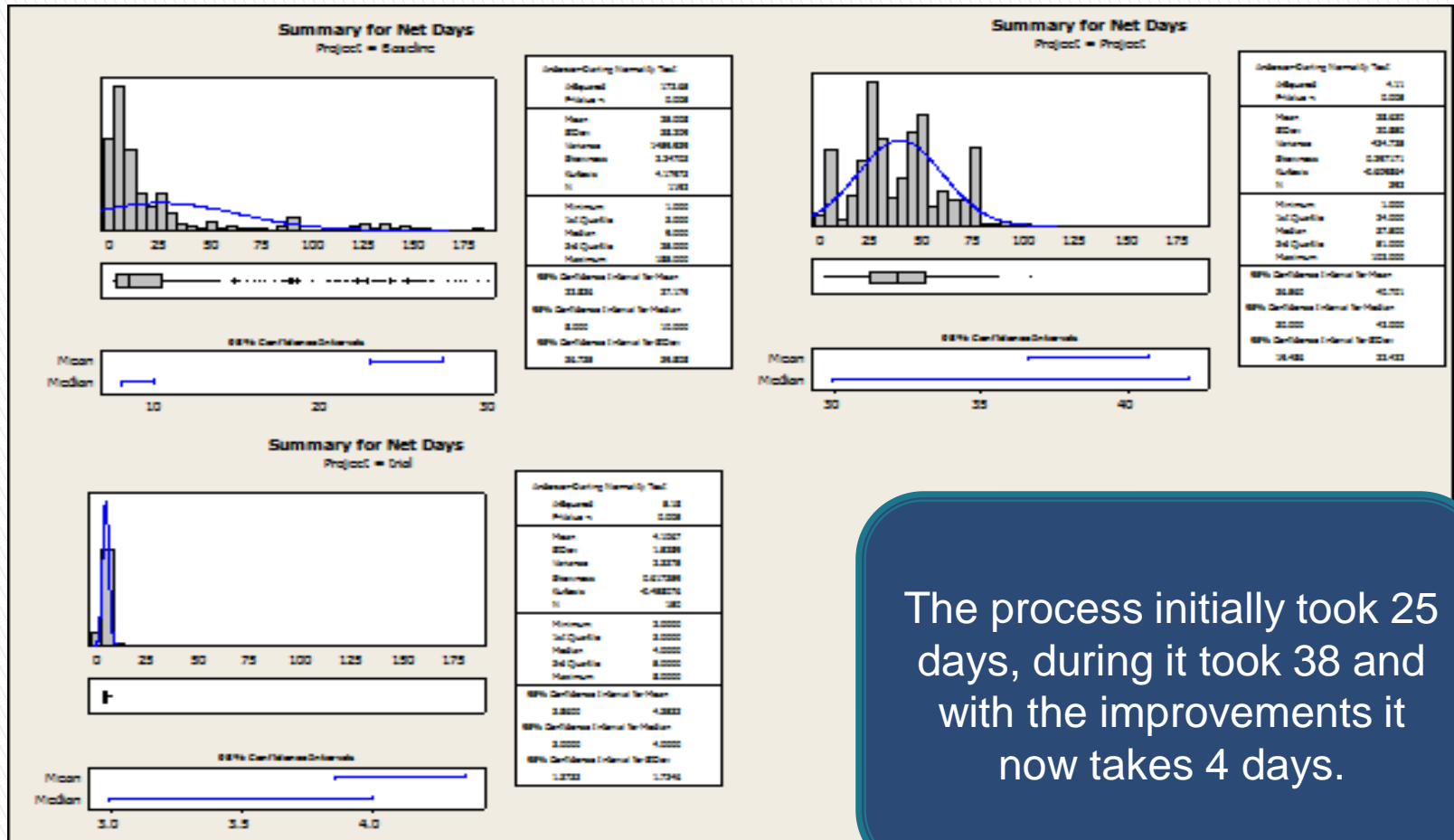
This is all the work orders that would have gone to the Service Center and now we have the WBO check the meters first. It has taken 42% of the work flow away to give them more time.

Improve Phase

10. Validate Measurement System



Graphical Summary




The process initially took 25 days, during it took 38 and with the improvements it now takes 4 days.

Control Phase

12. Implement Process Controls



Procedure Manual

	Department Procedure	Water Business Department DNR
---	-------------------------	----------------------------------

I. Purpose: Decrease number of days to complete DNR work orders

II. Scope: Create and close DNR work orders

III. Definition:
 DNR-does not register
 WBO-water business office
 Sungard Green Screen- computer system

IV. Procedure:

- 1) Receive consumption report from Steven Whitehead. See sample below.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Customer	Location	Service	Meter	Address	Cycle	Class	Bill Date	Current	Previous	Month 3	Month 4	Month 5
2	1840	36284 IR		5472042	3199 S BROADWAY AVE D	03-09	COMMERCIAL	415012	0	0	0	0	1
3	2020	11992 WA		5419043	1336 GOLIAD ST	03-17	RESIDENTIAL	415012	0	1	0	0	1
4	2025	11992 WA		7134392	1336 GOLIAD ST	03-17	RESIDENTIAL	415012	0	1	0	0	1

Form DNR1

- 2) If it shows zero current usage go to Sungard Green Screen to issue a work order for the Water Business Office guys to go out to check. (the ones that work in the field)


```

WFO1000      CITY OF TYLER      5/18/12
              Work Request Maintenance  13:27:40
Customer ID   : 01815 WRIGHT, ADAM COREY
Location ID   : 42200 3801 CRAWFORD AVE
Type options, press Enter
F2=Change  F3=Copy  F4=Delete  F5=Display  F6=Classification  F7=Authorize
F8=Job order  F9=Close  F10=Comments  F11=Overhead  F12=Hold  F13=Locates ...
Request Action Request Close
-----
001 Location Tab# Description      Number  Taken  Date  Sta
-----
42200 Initial Read                WFO017800  00  4/28/08  5/18/08  CL
            
```
- 3) They go to the customer home and check to see if the meter is dnr or not.
 - a. Look for a facet on the property.
 - b. Turn the water on to make sure that the dial on the meter moves. If the numbers and the dial move the meter is not dnr if not it is a dnr.
- 4) Work orders are brought back to the office. Then the office staff closes the work orders and holds them until the Service Center works in that area.
- 5) Then a work order is done for the Service Center to go out and fix the register.

309 #	Form #	Originating Date	Revision Date	Revision #
15001		12/1/11	12/1/11	1

Savings

12. Implement Process Controls



Initial Cost	
Soft Savings	
Hard Savings	\$ 14,149
Total Savings	\$ 14,149
Time Saved (Hrs)	831

Data			Hard Dollar Calculations					Time Savings
Month	Total DNR	Avg Time	Avg Time for Previous DNR completion	Cost @ \$1.42 per day * total DNR	Estimate cost if DNR at Previous completion rate	Cost at Current Completion Rate	Hard Savings	Time Saved (Hrs)
Apr	56	4.11	25	\$ 79.52	\$ 1,988.00	\$ 327	\$ 1,661	167
May	40	7	25	\$ 56.80	\$ 1,420.00	\$ 398	\$ 1,022	144
Jun	38	3	25	\$ 53.96	\$ 1,349.00	\$ 162	\$ 1,187	176
Jul	198	4	25	\$ 281.16	\$ 7,029.00	\$ 1,125	\$ 5,904	168
Aug	140	3	25	\$ 198.80	\$ 4,970.00	\$ 596	\$ 4,374	176
Sep								
Oct								
Nov								
Dec								
Jan								
Feb								
Mar								

Reducing Police Overtime



Project Start: 12-13-2011

Project Revision: 1

Project Champion: Rusty Jacks

Black/Green Belt: Jimmy Toller

Define Phase



Project Authorization

Organization:	Champion:	Process Owner:
Police Department	Gary Swindle	
Project:	Project #:	
Police Department Overtime		
Problem Statement:		
As an organization, the Tyler Police Department is experiencing a problem with: Employee Overtime. The area where this problem is occurring is: All Units / Divisions. The problem has existed for at least: 1 Year. The magnitude of the problem is: 109% (\$547,000) of budget and the expected performance is: <= 100% of budget (\$500,000). The effect this problem is having on our organization is: excess overtime costs above the budgeted allocation. This cost the department \$47,000 in FY 2010-11.		
Project Objective:		
The purpose of this project is to identify the cause for the overtime and implement active management strategies to better utilize available manpower. The goal is to reduce departmental overtime by 10% and come within budget guidelines for FY 2011-2012.		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
50%	10%	\$54,700
Approval Date:	Champion Signature:	Process Owner Signature:
12/12/2011		Russell Jacks
Estimated Completion Date:	Project Leader:	Financial Analyst:
2/24/2012	Rusty Jacks	

Define Phase



Project Definition and Scoping

Metrics (unit of measure):

Overtime is tracked by division and reason based on overtime sheets submitted by employees.

Critical to Satisfaction (linkage to customer):

Maintain fiscal responsibility for overtime funds by ensuring that any overtime worked by police department employees is necessary and reasonably unavoidable.

Defect Definition (include opportunity):

Scheduled or unscheduled overtime worked by police department employees that could have reasonably been avoided through active management strategies.

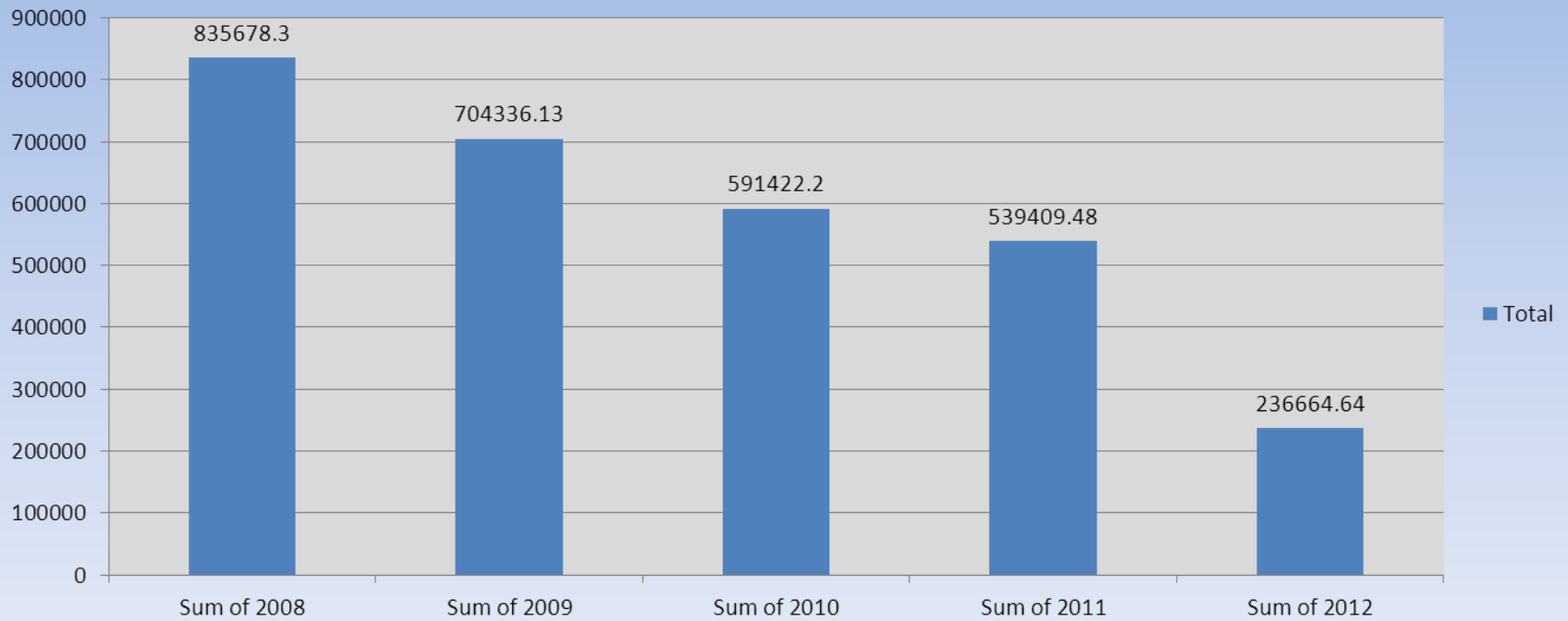
Scope of Project:

Police department overtime related to training, staffing, and working over.

Measure Phase



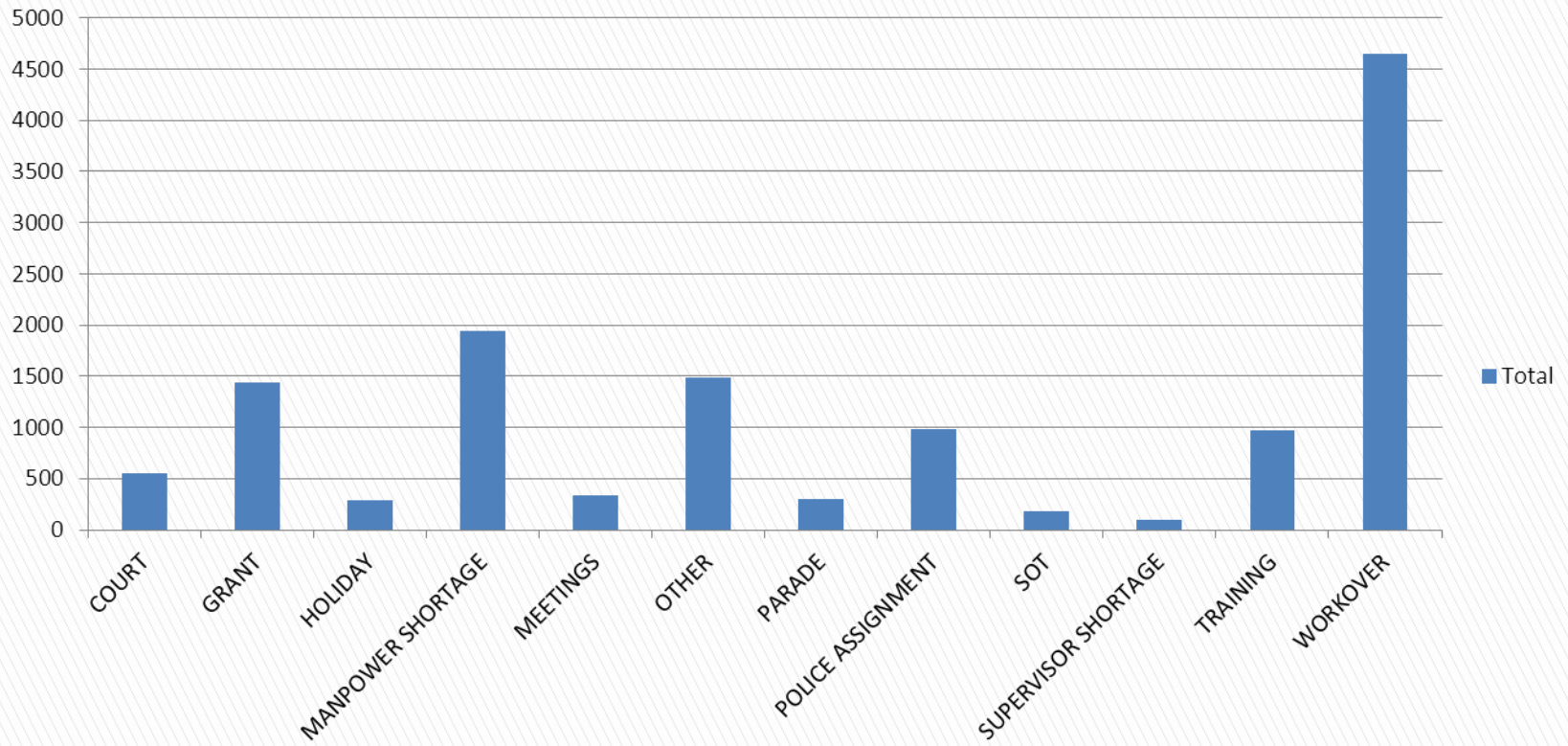
Actual Overtime Cost Per Fiscal Year



Analyze Phase



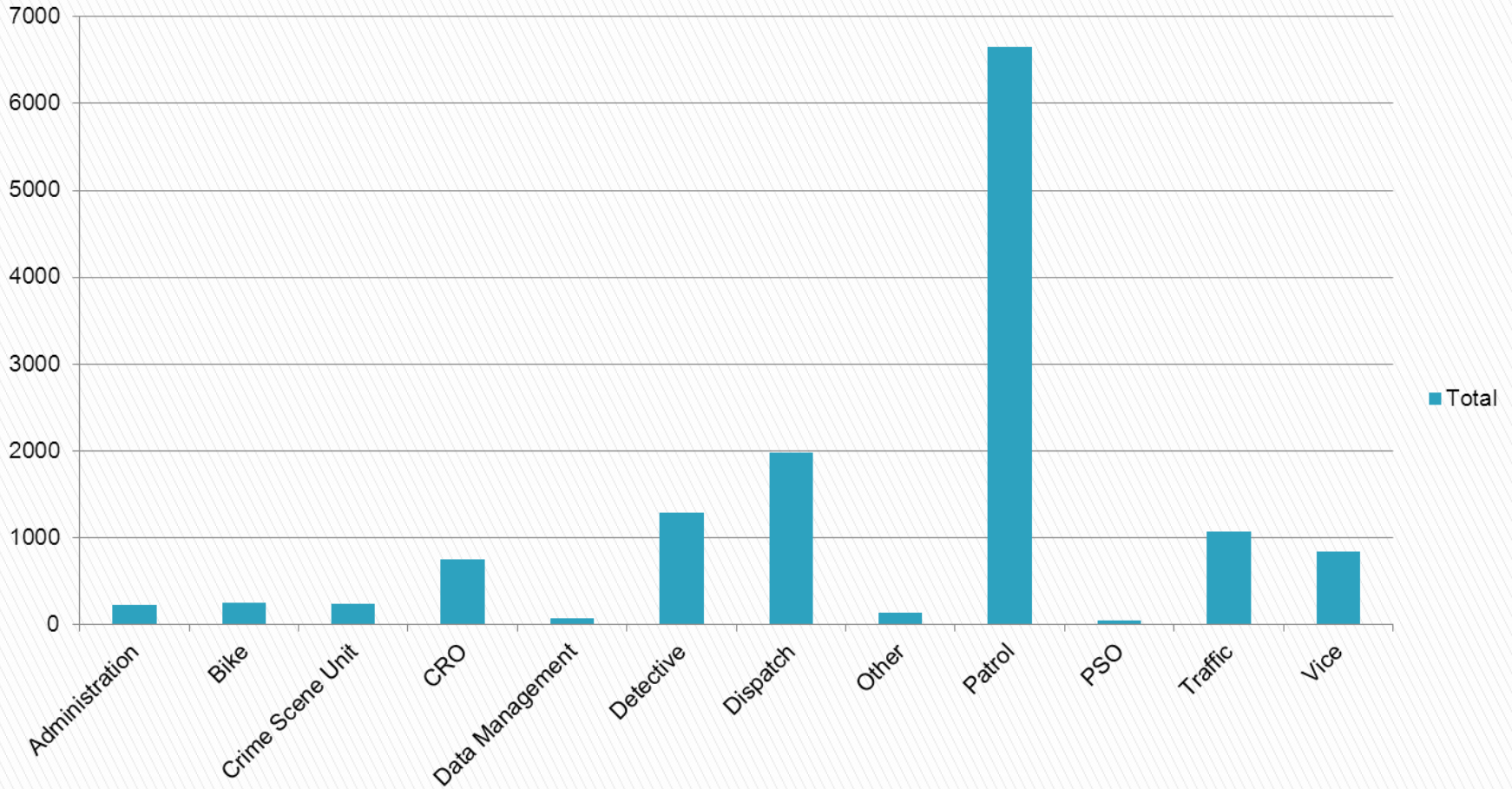
2010 – 2011 Fiscal Year Overtime Hours / Reasons



Analyze Phase



2010 – 2011 Fiscal Year Overtime Hours by Unit



Analyze Phase



YX Diagram

Demo

Process:	Police Department Overtime
Date:	12/19/2011

Ranking

1	3	5	7	9
Unlikely	Some what unlikely	Some what	Some what likely	Most Likely

Delete

View

Input Variables (Xs)	Output Variables (Ys)	Description	Weight	1	2	3	4	5	6	7	8	9	10	Ranking
				Work Over	Training OT	Officer Shortage	Supervisor Shortage	Dispatch Shortage	Court	Meetings	Call-out			
1 Inefficient Supervision				5	9	3	3	3	1	3	1			28
2 Inefficient use of manpower				3	1	7	7	7	1	7	1			34
3 Lax Notification / Approval				9	9	1	1	1	1	1	1			24
4 No Central Accountability				5	5	5	5	5	1	1	3			30
5 Lax Overlap Supervision				5	1	1	1	1	1	1	1			12
6 Intentional Abuse				3	1	1	1	1	1	1	1			10
7 Poor Control Procedures				7	7	1	1	1	1	1	1			20
8 Little Use of Flex Days				1	9	1	1	1	1	1	1			16
9 Inadequate Staffing				3	1	7	7	7	1	1	1			28
10 Inefficient dispatching				5	1	1	1	1	1	1	1			12
11 Organizational mindset				3	3	1	1	1	1	1	1			12
12 Officer mindset				3	1	1	1	1	1	1	1			10
13 Major Crime				3	1	1	1	1	5	0	9			21
14														
15														

Improve Phase

Accountability



- ▶ Shift Commanders come in 1 hour prior to their shift in order to manage shift overlap
- ▶ Officers must notify the on-coming shift commander as soon as they become aware that they will be working over
- ▶ Oncoming shift commander approves the length of the OT, or finds an alternative
- ▶ Upon reaching the approved time limit, the officer must either be finished or re-contact the shift commander for more time



- ▶ Upon completion of assignment, the OT officer must turn his OT sheet in to the approving shift commander

Improve Phase

Accountability



- ▶ Monthly reports will be distributed to all command personnel
- ▶ Shift Commanders will be held accountable for overtime related to work over
- ▶ Division Commanders will be held accountable for pre-planned overtime
- ▶ Individual officers will be held accountable for making proper notifications when scheduling overtime or working over

Improve Phase

Procedures



- ▶ Reduce briefing time to 10 minutes or less unless conducting roll-call training
- ▶ Set a goal of having officers in service (loaded and signed on in their cars) in 20 minutes or less of shift start
- ▶ Change overlap officers radio numbers to end in 7,8,or 9 so that they are easy to distinguish from regular units

Improve Phase

Procedures



- ▶ Non-mandatory training – Officers will be offered option of flexing out within the same week or not attending the training
- ▶ Instructors will be given the option to flex their hours within the same week or having another instructor cover their days off
- ▶ Training overtime will have to be approved in advance by the division commander



- ▶ Any pre-planned overtime (training, crime watch, special event, etc.) will have to be approved in advance by the appropriate division commander.
- ▶ Specialized Units (bikes, CRO, K9, etc.) will utilize flex time within the same work week for events scheduled outside their regular work hours.

Improve Phase

Procedures



- ▶ Allow officers who have to work on a city holiday to “holiday out” any other day within the same week



- ▶ Overtime sheets will be modified to eliminate confusing codes and better document who approved / scheduled the OT.

Improve Phase

Training



- ▶ Supervisors will be trained on new procedures and expectations
- ▶ Dispatchers will be trained on efficient dispatching at shift change
- ▶ Officers will be trained on new notification procedures and expectations

Control Phase

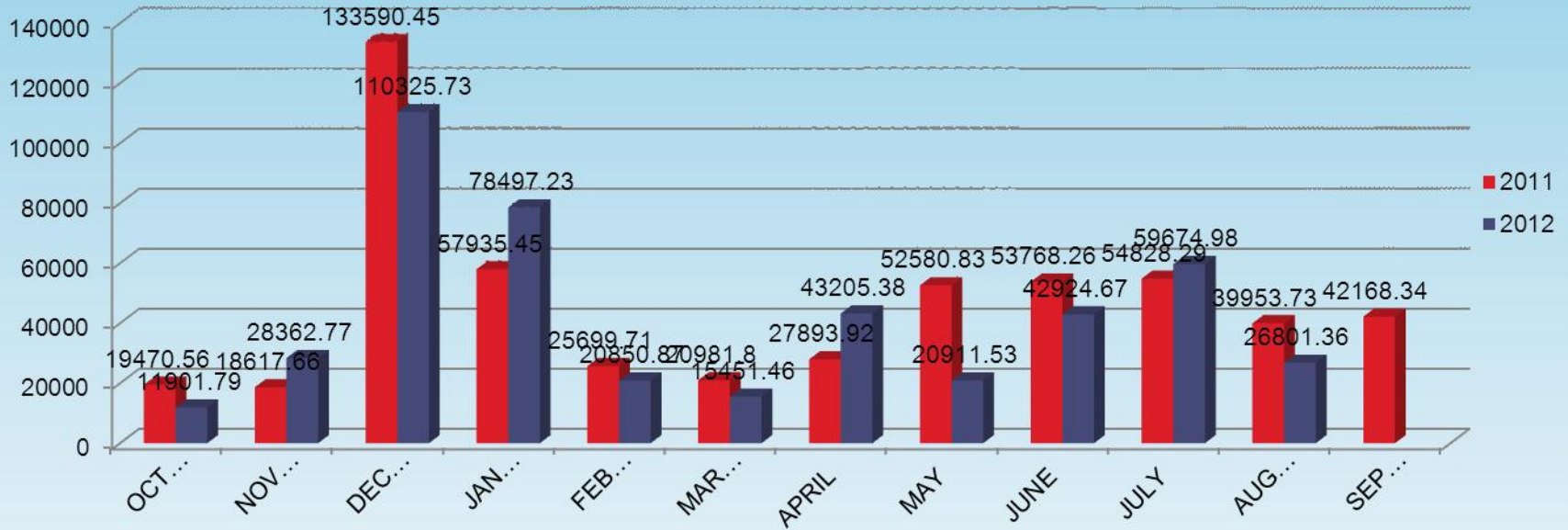


INITIAL COST		October-11	914.5	885.02	-29.48	-\$1,387.92	
FY 10-11 Cost	\$547,000.00	November-11	786	885.02	99.02	\$4,661.86	
Hours	11619.45	December-11	700	885.02	185.02	\$8,710.74	
Average Cost Per Hr. 10-11	\$47.08	January-12	501.25	885.02	383.77	\$18,067.89	
		February-12	555.5	885.02	329.52	\$15,513.80	
SAVINGS GOAL		March-12	698.5	885.02	186.52	\$8,781.36	
		April-12	585.28	885.02	299.74	\$14,111.76	
FY 11-12 Budget	\$500,000.00	May-12	640.29	885.02	244.73	\$11,521.89	
Average Cost Per Hr. 10-11	\$47.08	June-12	640.04	885.02	244.98	\$11,533.66	
Estimate Hrs.	10,620.22	July-12	1029.5	885.02	-144.48	-\$6,802.12	
Estimate Monthly Hrs.	885.02	August-12	990	885.02	-104.98	-\$4,942.46	
		September-12		885.02		\$0.00	
		October-12		885.02		\$0.00	
		November-12		885.02		\$0.00	
		December-12		885.02		\$0.00	
		January-12		885.02		\$0.00	
				TOTAL SAVED	1694.36	\$79,770.47	

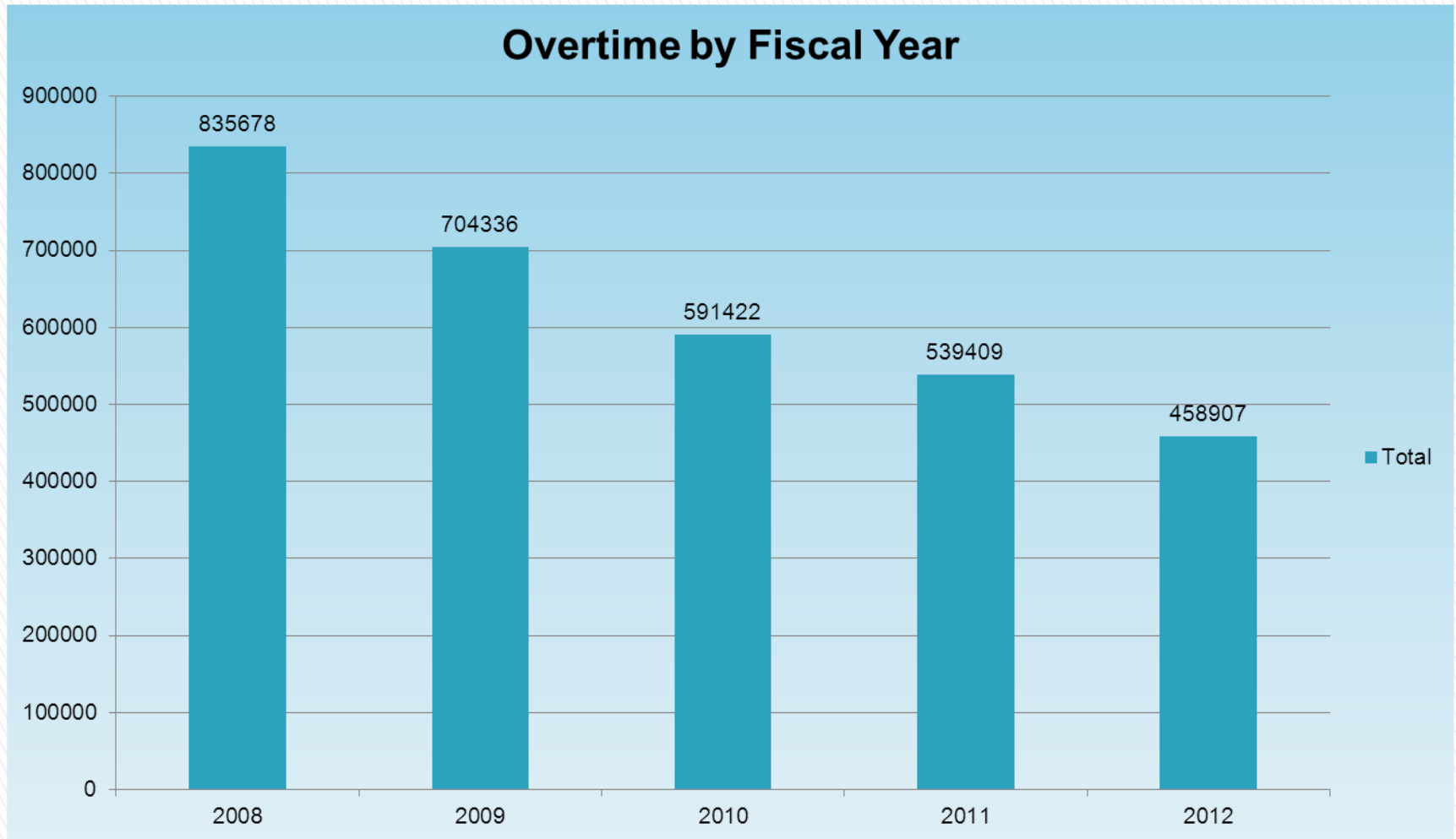
Savings



Month to Month Comparison of Actual Overtime Expenditure



▶ Savings





Year to Date Savings

Up to Aug. 31st

\$46,412