

Communications Retention



Project Start: 6 / 2011

Project Revision:

Project Champion: Steve Sharron

Black/Green Belt: Jimmy Toler

Define Phase

1. Select Output Characteristics



- Communications Retention
 - Since 2-26-2010, the Tyler Police Department Communications Unit has had an Average Turnover Rate of 2.34 %.
 - During this time period, thirteen (13) employees have left the Communications Unit.
 - This effectively results in the loss of an telecommunicator every **1.7 months**.

Define Phase

1. Select Output Characteristics



- **Types of Data**

1. Turnover Rate

2. Employee Replacement Costs

3. Overtime Costs

4. Cost of Poor Quality

Define Phase

2. Define Performance Standard



Project Charter

Project Authorization

Organization:	Champion:	Process Owner:
City of Tyler	Susan Guthrie	Gary Swindle
Project:	Project #:	
Reduce Employee Turnover at Dispatch		
Problem Statement:		
<p>The City of Tyler is experiencing a problem with employee turnover. The area where this problem is occurring is in the Police/Fire Dispatch area. This is a problem that has existed for the past three years. The average turnover is 2.34%. Between 2-2011 and 8-2011, thirteen employees have left the communications unit for various reasons. The effect of this problem is having on the organization is that increases overtime costs and hiring and exit cost escalate for the city to an estimate \$150,740 per year</p>		
Project Objective:		
<p>Our objective is to red the average turnover rate by 50% and reduce the costs of overtime and hiring costs by 50%.</p>		
Estimated Defect Level:	Initial Goal:	Estimated Benefits:
2.34%	1.17%	
Approval Date:	Champion Signature:	Process Owner Signature:
6/6/2011 		
Estimated Completion Date:	Project Leader:	Financial Analyst:
12/1/2011 	Guillermo Garcia	

Measure Phase

6. Identify Variation Sources



YX Diagram Summary

Process:	Dispatch Turnover
Date:	

Output Variables	
Description	Weight
Employee Turnover	9

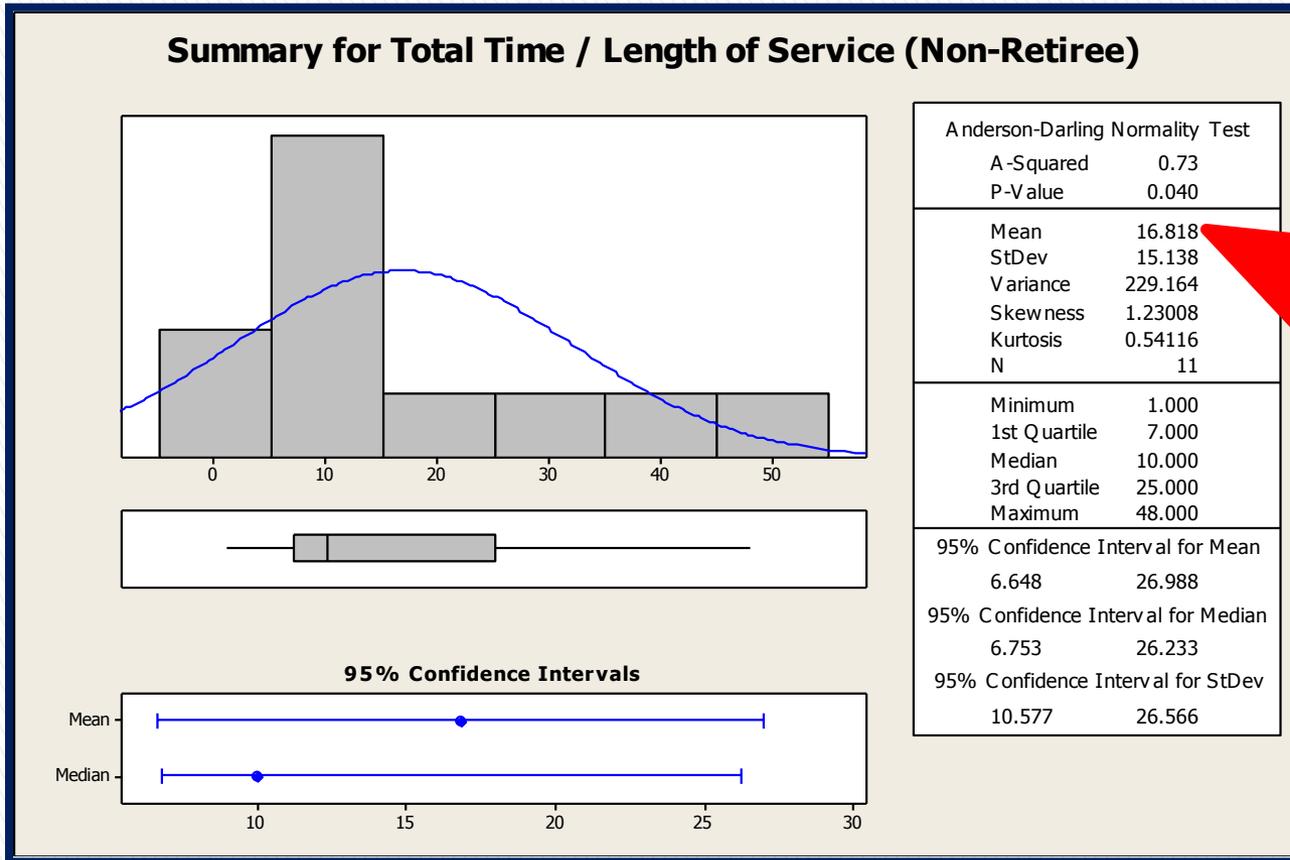
Input Variables	
Description	Ranking
pay rate	81
stress	81
geared to collage students	81
shift work	63
time off	63
hiring process	63
CAD system	63
radio system	63
Education between PD & TPD	63
step increase	45
phone system	45
training standards	45
ergonomics	45
hiring requirements	45
lack of opportunity advancement	27
no lunch breaks	27
bathroom broken	27
incentive pay	27
HR disconnect	27
no windows	9
insects	9
removal of equipment	9
process methodology	9
exit interview	9
employee evaluation	9

Analyze Phase

8. Discover Variable Relationships



- PST II Training Program – 22 Weeks (5.5 Months)



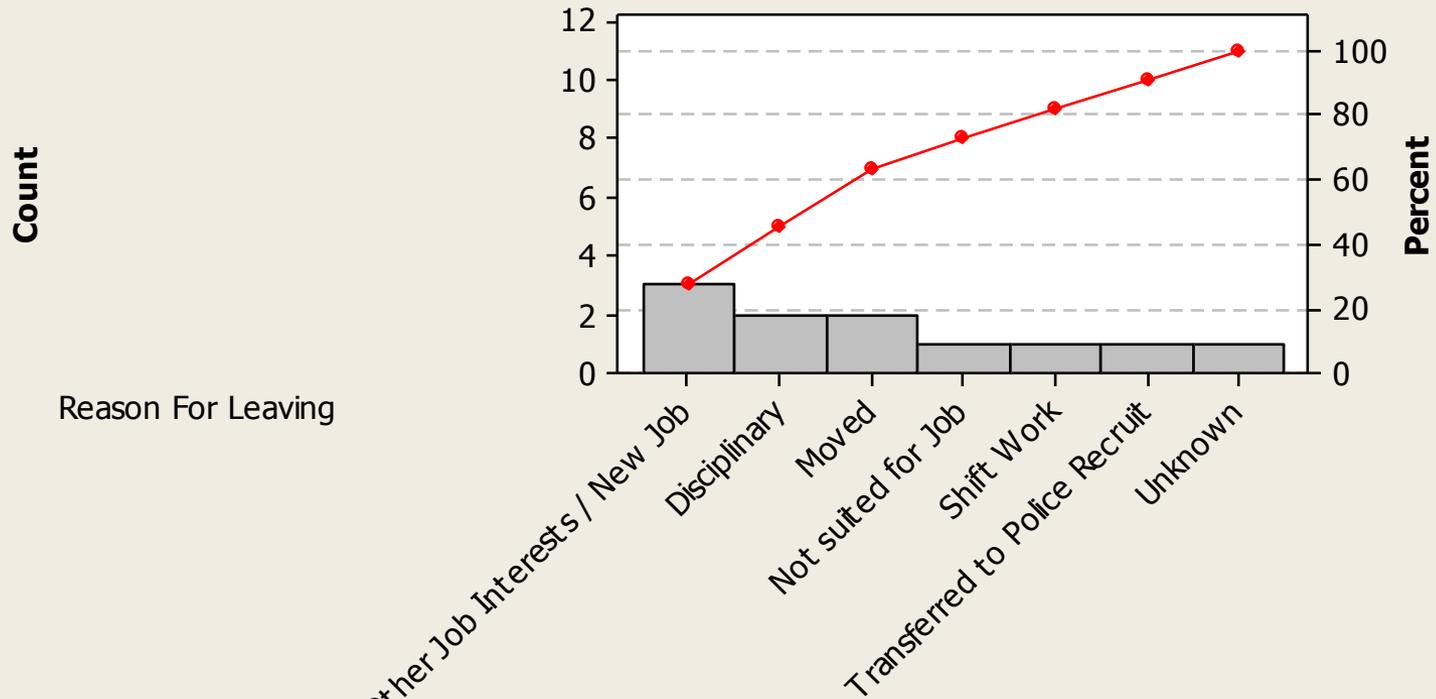
Average Length of Service for Employees that left the Police Department was **16.8** Months

Analyze Phase

8. Discover Variable Relationships



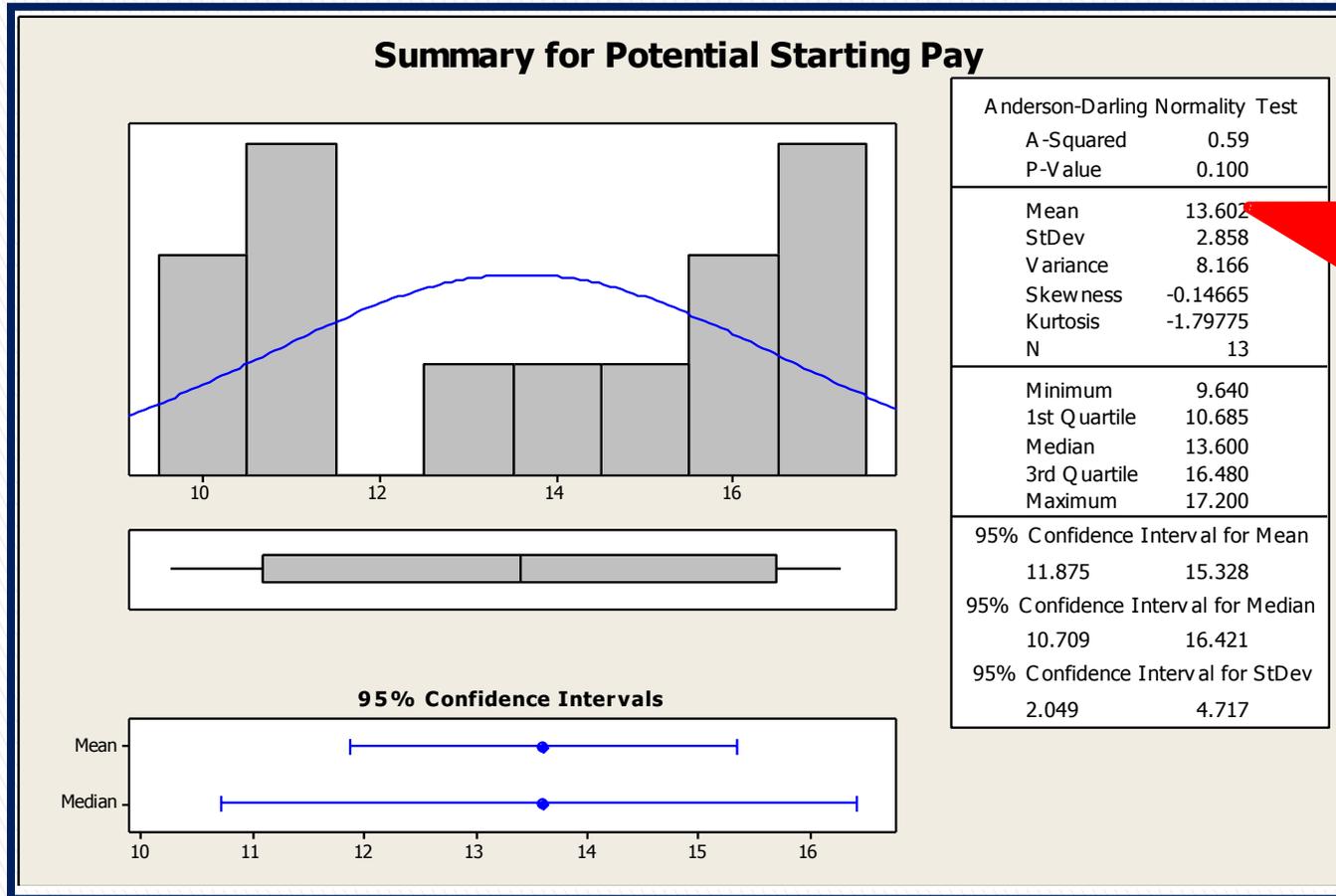
Pareto Chart of Reason For Leaving (Not Retirees)



Count	3	2	2	1	1	1	1
Percent	27.3	18.2	18.2	9.1	9.1	9.1	9.1
Cum %	27.3	45.5	63.6	72.7	81.8	90.9	100.0

Analyze Phase

8. Discover Variable Relationships

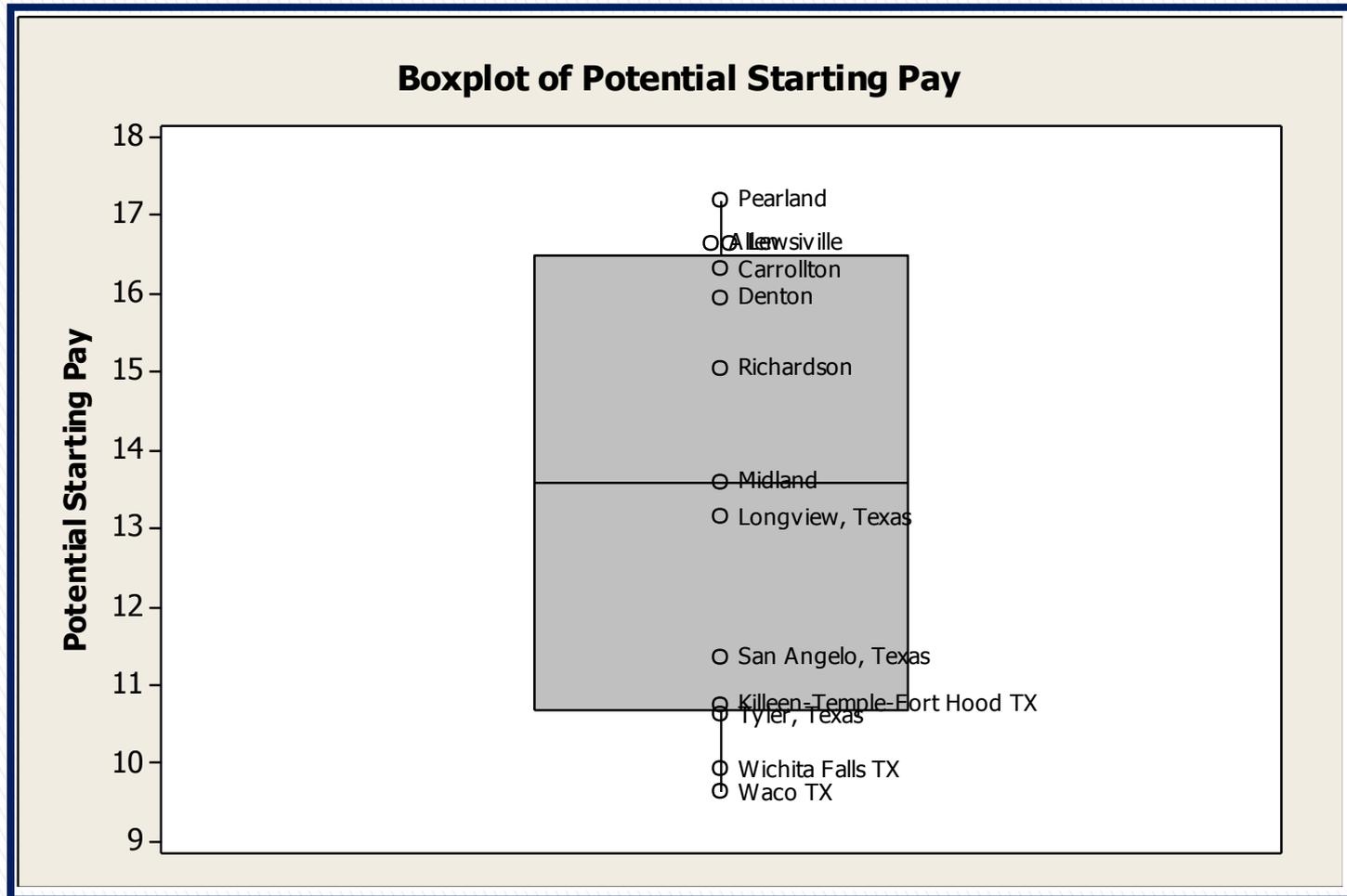


Anderson-Darling Normality Test	
A-Squared	0.59
P-Value	0.100
Mean	13.602
StDev	2.858
Variance	8.166
Skewness	-0.14665
Kurtosis	-1.79775
N	13
Minimum	9.640
1st Quartile	10.685
Median	13.600
3rd Quartile	16.480
Maximum	17.200
95% Confidence Interval for Mean	
	11.875 15.328
95% Confidence Interval for Median	
	10.709 16.421
95% Confidence Interval for StDev	
	2.049 4.717

Average Starting Salary for cities surveyed was \$13.60

Analyze Phase

8. Discover Variable Relationships

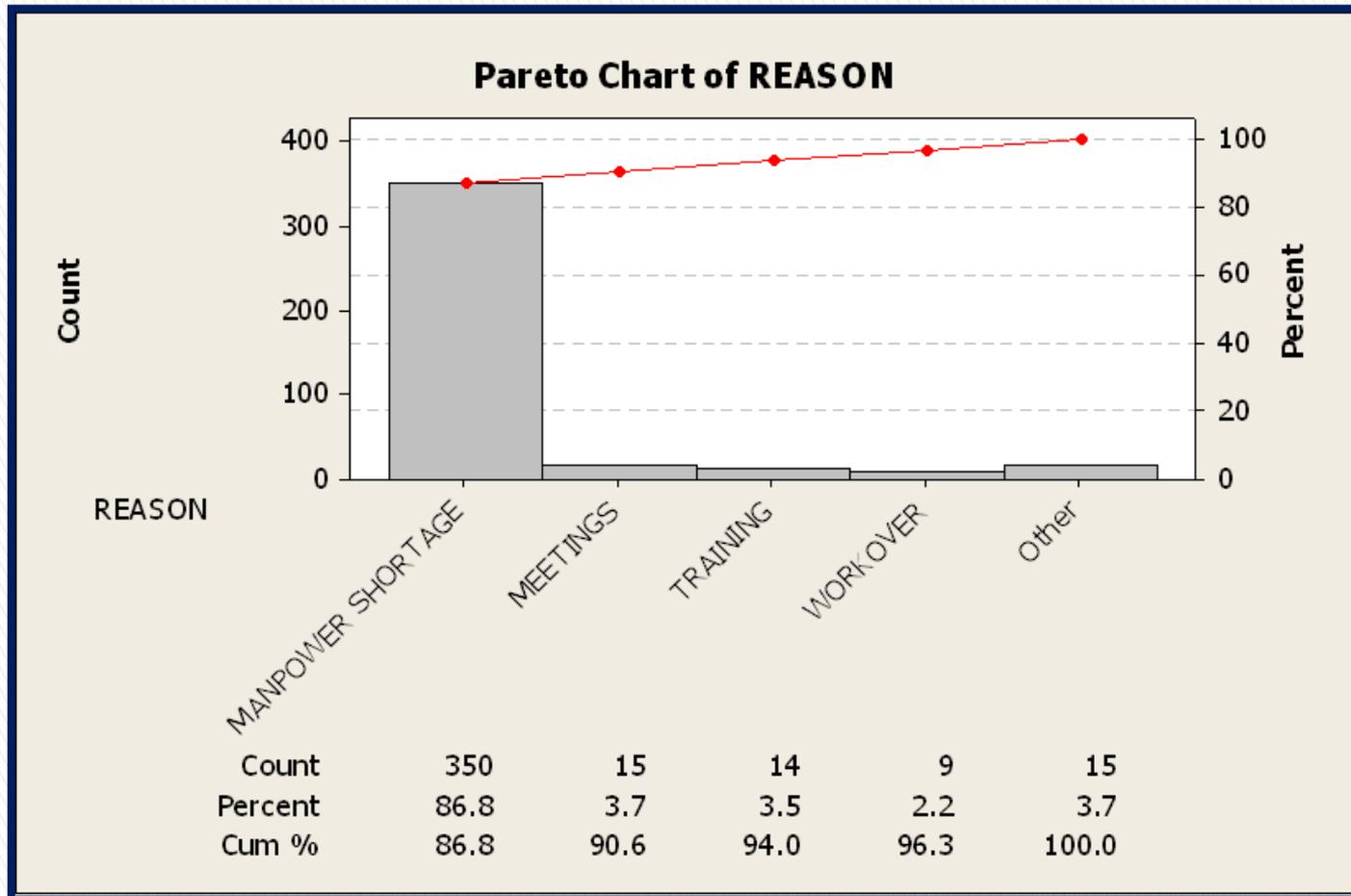


Analyze Phase

8. Discover Variable Relationships

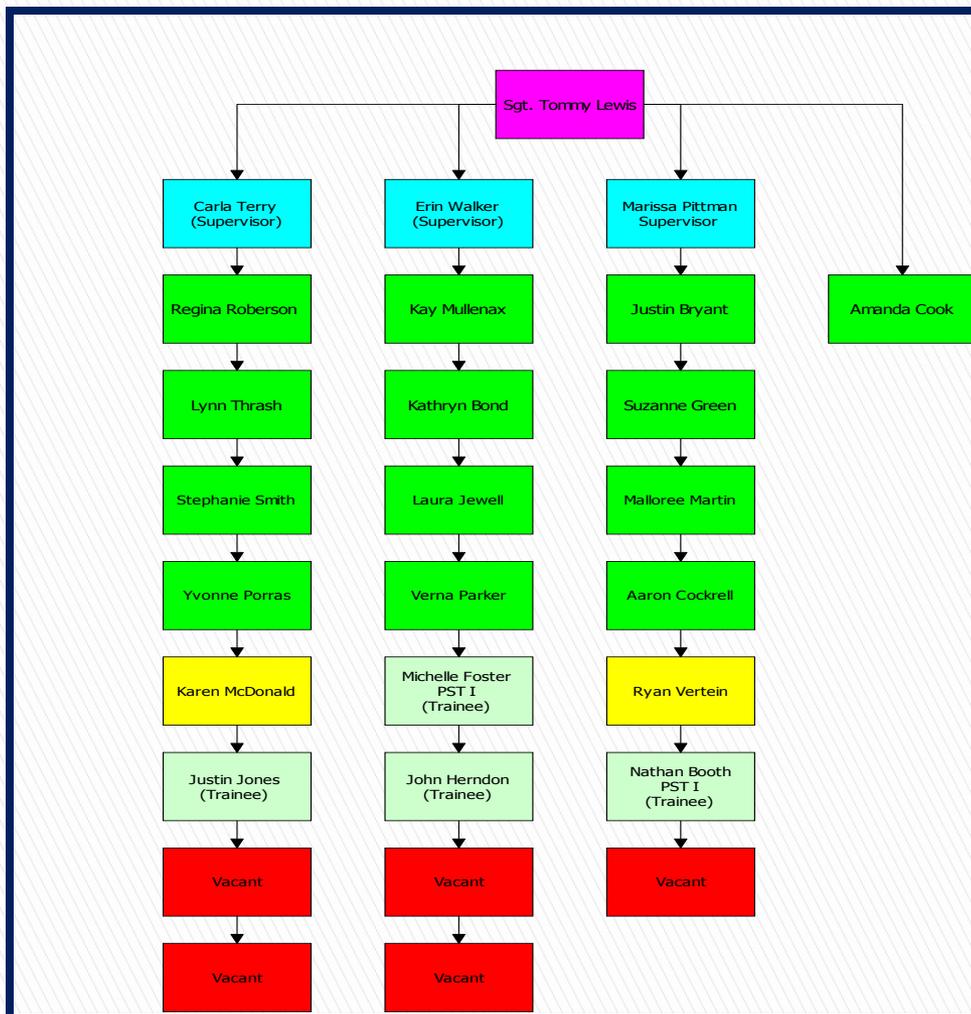


- Cost of Overtime - \$36,755 Manpower Shortage



Analyze Phase

8. Discover Variable Relationships



Analyze Phase

8. Discover Variable Relationships



- Dispatch Call Activity (Higher Ground)

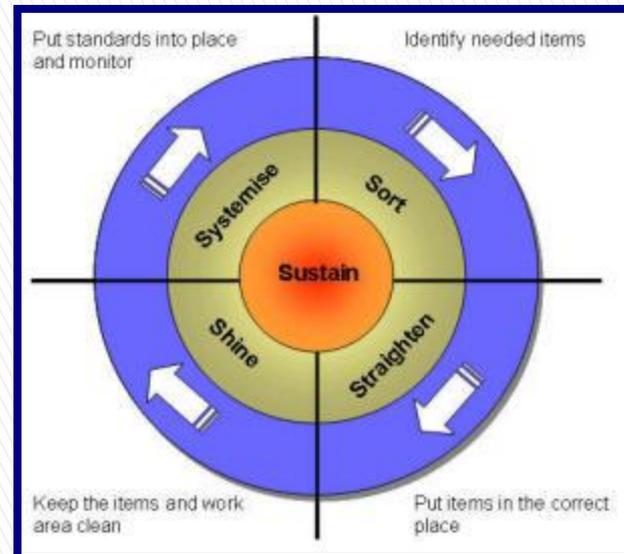
10/10/2011														
TIME	Disp 1	Disp2	Invest / Traffic	Com 1	Com 2	Com 3	Com 4	Com 5	TFD Disp	Fire Ops 1	Fire Ops 2	Fire Ops 3	Fire Ops 4	TOTAL
2400-0100	28	15	1	2			1	3	4					54
0300-0400	15	11				1	1	6	4			1		39
0400-0500	8	5				2			1					16
0500-0600	1			2				3						6
0600-0700	6			7			3	7	5					28
0800-0900	15	8	15	15	17	9		13	7					99
0900-1000	27	5	1	9	12	8		21	14					97
1000-1100	22	4	22	8	13	7		10	4					90
1600-1700	26	20	6	3	14	10	11	18	8					116
1700-1800	25	12	23	4	16	8	10	18	3					119
1800-1900	26	17	12	9	19	8	16	19	9					135
1900-2000	30	11	10	8	13	9	6	13	9					109
2000-2100	20	8	13	6	22	9	3	15	3	1				100
2100-2200	26	10	1	1	10	3	6	6	6					69
2200-2300	28	22	4	4	19	5	10	14	2					108
2000-2100	20	8	13	6	22	9	3	15	3	1				100
2100-2200	26	10	1	1	10	3	6	6	6					69
2200-2300	28	22	4	4	19	5	10	14	2					108
2300-2400	24	9	2	1	8	5			1					50

Improve Phase

9. Implement Improvements



- Sort, Stabilize, Shine, Standardize, Sustain



Improve Phase

9. Implement Improvements



- Sort

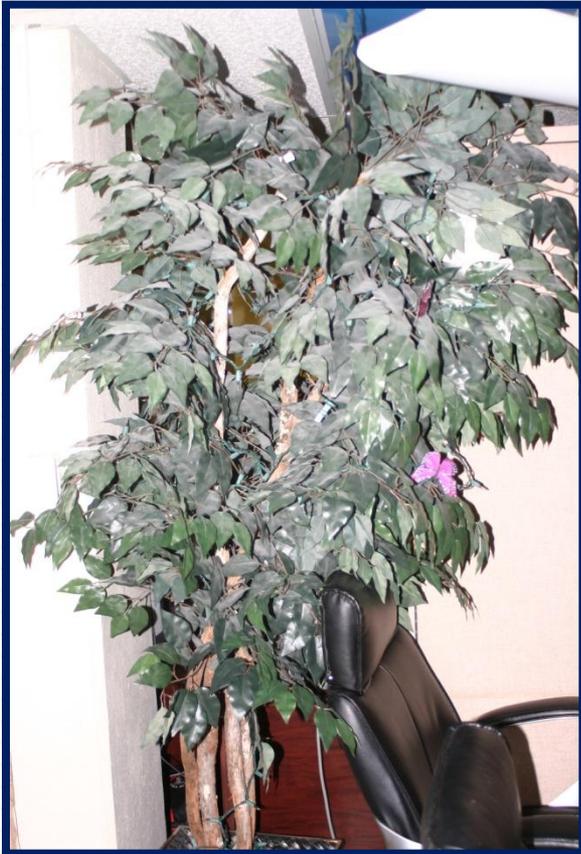


Improve Phase

9. Implement Improvements



- Shine

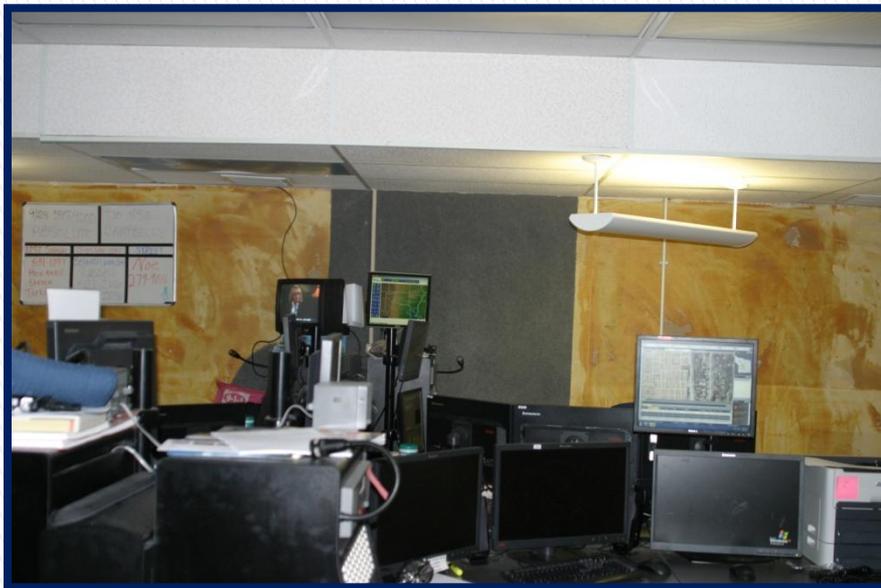


Improve Phase

9. Implement Improvements



- Shine

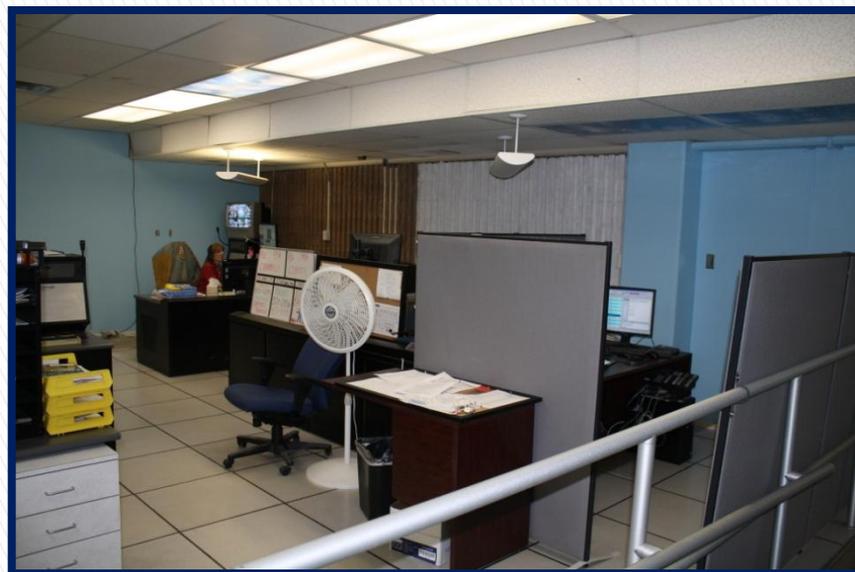


Improve Phase

9. Implement Improvements



- Shine

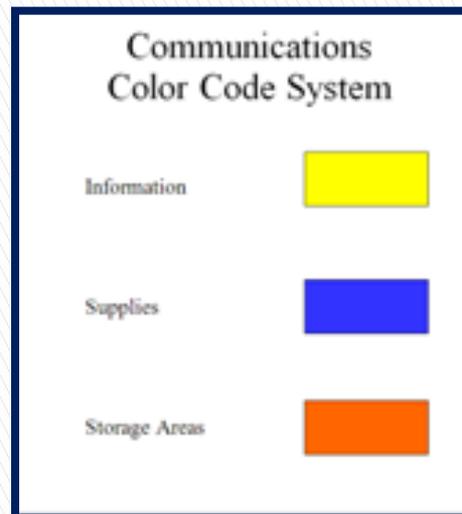


Improve Phase

9. Implement Improvements



- 5S improvements are continuing.
- Will include Visual Management Standardization utilized in Property and the Armory.



Improve Phase

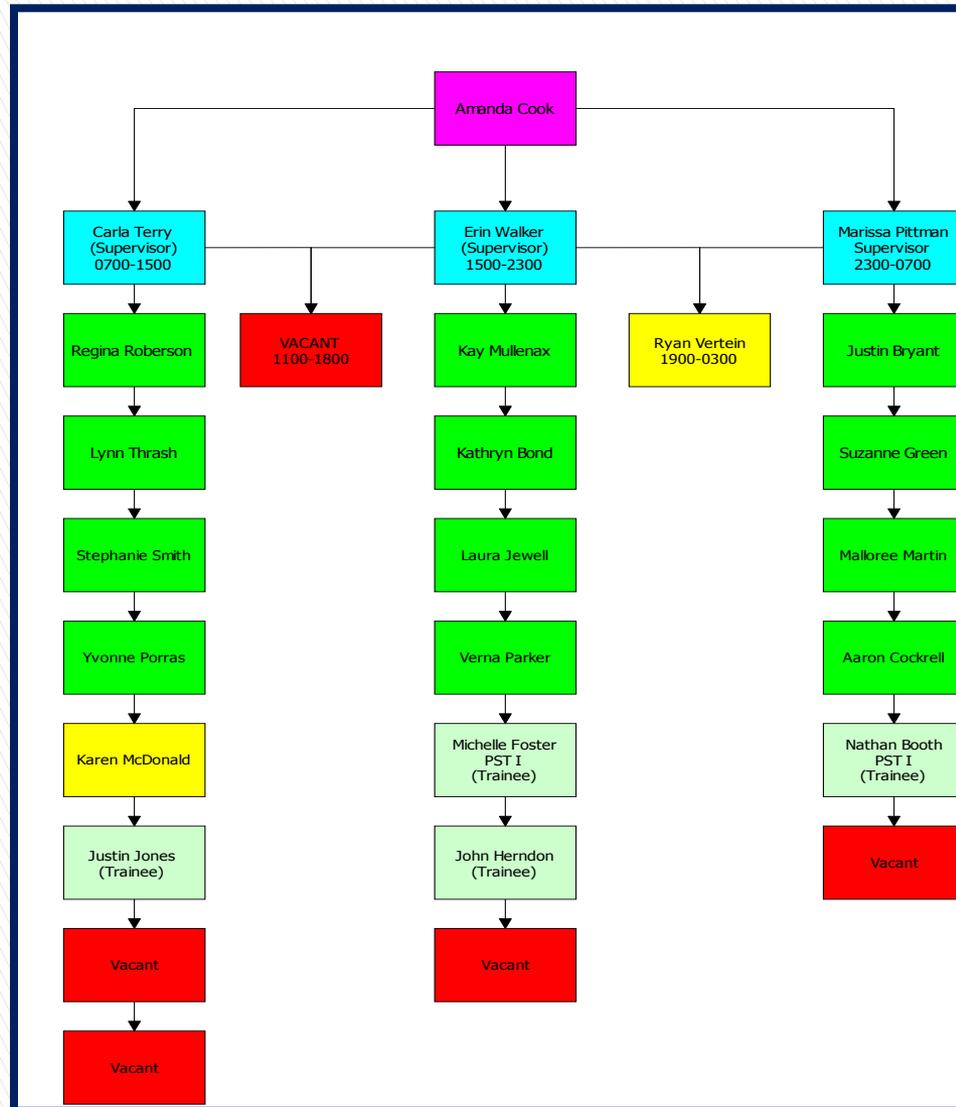
9. Implement Improvements



- Creation of a “Public Safety Administrator”
- Hiring telecommunicators in as a PST II.
- Reclassification:
 - PST II (From a 209 to a 210)
 - Entry pay moves to \$13.53 / hour.
 - PST Supervisor (From a 211 to a212)
 - Entry pay moves to \$16.58 / hour.

Improve Phase

9. Implement Improvements



Improve Phase

9. Implement Improvements



1st Shift				Days Off	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Carla Terry	Supervisor		0700-1500	Sat/Sun		X	X	X	X	X	
	PST II		0700-1500	Sun/Mon			X	X	X	X	X
	PST II		0700-1500	Mon/Tues	X			X	X	X	X
	PST II		0700-1500	Fri/Sat	X	X	X	X	X		
	PST II		0700-1500	Wed/Thur	X	X	X			X	X
PST I	PST I	Call / Fire	0700-1500	Tues/Wed	X	X			X	X	X
TOTAL PST II					3	3	4	4	4	4	3
TOTAL STAFFING					4	4	4	4	5	5	4
2nd Shift				Days Off	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Erin Walker	Supervisor		1500-2300	Sun/Mon	X	X	X	X	X	X	X
	PST II		1500-2300	Sat/Sun		X	X	X	X	X	
	PST II		1500-2300	Fri/Sat	X	X	X	X	X		
	PST II		1500-2300	Mon/Tues	X			X	X	X	X
	PST II		1500-2300	Wed/Thurs	X	X	X			X	X
PST I	PST I	Call / Fire	1500-2300	Tues/Wed	X	X			X	X	X
TOTAL PST II					3	3	4	4	4	4	3
TOTAL STAFFING					4	4	4	4	5	5	4
3rd Shift				Days Off	Sun	Mon	Tue	Wed	Thur	Fri	Sat
Marissa Pittman	Supervisor		2300-0700	Fri/Sat	X	X	X	X	X		
	PST II		2300-0700	Mon/Tues	X			X	X	X	X
	PST II		2300-0700	Sun/Mon			X	X	X	X	X
Vacant 1	PST II		2300-0700	Thurs/Fri	X	X	X	X			X
	PST II		2300-0700	Sat/Sun		X	X	X	X	X	
PST I	PST I	Call / Fire	2300-0700	Tues/Wed	X	X			X	X	X
TOTAL PST II					4	4	5	4	5	4	4
TOTAL STAFFING					5	5	5	4	5	5	5
Vacant 2	PST II	OVERLAP	1100-1900	Wed/Thurs	X	X	X	X			X
	PST II	OVERLAP	1900-0300	Wed/Thurs	X	X	X			X	X



- Additional Improvements:
 - Reorganization of Radio Channels
 - Close Radio Channels when not needed.
 - Review of the JDQ and JEM in order to review the pay classification of PST II, PST Supervisor, and PST Administrator.



- Additional Improvements:
 - Mandatory rotation of channels to allow for downtime (reduction of stress).
 - Eventual elimination of the PST I (Call Taker) classification.
 - Transition of all future PST's to the classification of PST II (Dispatcher)

Improve Phase

9. Implement Improvements



- Additional Improvements:
 - Push towards continued education / certification of existing and future telecommunicators.
 - Intermediate
 - Advanced
 - ENP

Control Phase

12. Implement Controls



- Continue to Monitor Turnover Rate
- Monitor Cost of Training and Overtime
- Develop Control Plan
 - Scheduling Reviews
 - Staffing Issues
 - Overtime