



Six Sigma DMAIC Improvement Story

Green Belt Project Objective:
Improvement of the Invitation To Bid (ITB)
Process Cycle Time

Team:  **Xpress**
Procurement

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Adil Khan (Subject Matter Expert)



Ed Marquez (Sponsor)

Lean Six Sigma Problem Solving Process

The team utilized the 5-Step DMAIC problem solving process.

DMAIC Performance Improvement Process

Process Step		Description of Team Activities
Number	Name	
1	DEFINE	<ul style="list-style-type: none"> • Select Problem • Identify Project Charter • Develop Project Timeline • Establish Method to Monitor Team Progress • Construct Process Flowchart • Develop Data Collection Plan • Display Indicator Performance “Gap”
2	MEASURE	<ul style="list-style-type: none"> • Stratify Problem (i.e. “Gap”) • Identify Problem Statement
3	ANALYZE	<ul style="list-style-type: none"> • Identify Potential Root Cause(s) • Verify Root Cause(s)
4	IMPROVE	<ul style="list-style-type: none"> • Identify and Select Improvement(s) • Identify Barriers and Aids • Develop and Implement Improvement Plan • Confirm Improvement Results
5	CONTROL	<ul style="list-style-type: none"> • Standardize Improvements within Operations • Implement Process Control System (PCS) • Document Lessons Learned • Identify Future Plans



Select Problem

Management reviewed many problems using a selection Matrix.

Project Selection Matrix					
Problem(s) <i>(where cause is unknown and knowing cause is desired)</i>	Customer (Internal or External)	Selection Criteria			C=A*B Overall
		A Impact on Customer (Accuracy/ Cost /Timeliness)	B Need to Improve (Performance Gap)	Estim. Month for Project Ready and Prep'd	
1 PWWM: Bulky Trash Collection Costs are too high	External	4	4	Oct '12	16.00
PWWM: Public Works' Road & Bridge operations needs to be more efficient/effective (e.g. generalist vs specialist teams)	External	3	4	Oct '12	12.00
3 PWWM: Capital construction projects not getting done quickly enough (especially length of time to launch project)	External/Internal	3	3	Oct '12	9.00
4 PWWM: Costs of Chemical Collection are too high	External	3	3	Oct '12	9.00
5 PWWM: Carryover is too high in Special Taxing Districts	External	3	3	Oct '12	9.00
6 Internal Services Department: Procurement process is too long/cumbersome	Internal	4	4	Oct - Nov '12	16.00
7 WASH: too long to respond to customer service calls	External	4	4	Nov '12	16.00
8 Transit: Cost of bus service has risen more dramatically than expected	External	4	4	Nov '12	16.00
9 Fleet Maintenance Costs are too high	Internal	tbd	tbd	Nov '12	TBD
10 PROS (Parks, Recreation, and Open Spaces): tbd	tbd	tbd	tbd	Nov - Dec '12	TBD
		Rating Scores:	5= Extreme 4= High	3= Moderate 2= Low 1=None	

The team was chartered by management to reduce cycle time for the Procurement Process



Identify Project Charter

The team developed a team Project Charter.

Project Charter		
Business Case	Project Name:	To Improve the ITB Process Cycle Time 2. <input checked="" type="checkbox"/>
	Problem/Impact:	Internal customers complain that the Procurement Process takes too long. Delays in procurement process adversely affect vendors and internal customers. Delays can also adversely impact service delivery to county residents and visitors. 1. <input checked="" type="checkbox"/>
	Expected Benefits:	Reduced time to process procurement ITB requests. Improve client, dept and vendor satisfaction; improve operational effectiveness.
Objectives	Outcome Indicator(s)	Q1- % of ITB related Contracts In Effect Timely
	Proposed Target(s)	Target=TBD
	Time Frame:	October 2012 thru March 2013
	Strategic Alignment:	Supports the County's Business Plan
Scope	In Scope:	Invitation to Bid (ITB) requests (of Contracts under \$500,000)
	Out-of-Scope:	RFP process and non-competitive Solicitations (and ITB Requests over \$500,000)
	Authorized by:	Ed Marquez, Lester Sola
Team	Sponsor:	Ed Marquez
	Team Leader:	Neivy Garcia, Miriam Singer
	Team Members:	John Sarduy, Lester Sola, Melissa Adames, Mario Morlote, Michael W. Ruiz, Adil Khan (Subject Matter Expert)
	Process Owner(s):	Lester Sola
	Mgmt Review Team:	Ed Marquez, Lester Sola
Schedule	Completion Date:	31-Mar-13
	Review Dates:	Monthly and Final Review in Mach 2013
	Key Milestone Dates:	See Action Plan

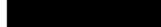
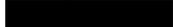
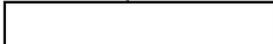
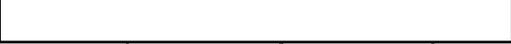
Develop Project Timeline Plan

The team developed a timeline plan to complete the Project.

4. 

Legend:	
	= Actual
	= Proposed

WHAT: Complete DMAIC Story Project by March 31, 2013

DMAIC Story Process Step	WHEN					
	2012					
	Oct	Nov	Dec	Jan	Feb	Mar
1. Define	  Completed 11/11/12					
2. Measure	  Completed 11/30/12					
3. Analyze			  Completed 12/12/12			
4. Improve				  1/30/13		
5. Control				  3/30/13		



Monitor Team Progress

The Team and Management used a Checklist to monitor team progress.

DMAIC Story Checkpoints		
PLAN	Step 1 Define	Objective: Demonstrate the importance of improvement needs in measurable terms.
		1. The stakeholders' need(s) were identified. ✓
		2. The problem can be described as an "object" with a "defect" with unknown cause(s) that need to be identified. ✓
		3. A line graph outcome indicator was constructed that appropriately measures the problem (or gap). ✓
	Step 2 Measure	Objective: Investigate the features of the indicator, stratify the problem and set a target for improvement.
		4. A schedule for completing the five DMAIC Story steps was developed. ✓
		5. Data contained or directly linked to the indicator were stratified from various viewpoints (i.e., what, where, when and who) and a significant dataset was chosen. ✓
		6. A target for improvement was established based on the stakeholders' need. ✓
	Step 3 Analyze	Objective: Analyze the stratified data to identify and verify the root causes.
		7. The impact of the target on the indicator was determined. ✓
		8. A problem statement that describes the "remaining dataset" was developed. ✓
		9. Cause and effect analysis was taken to the root level. ✓
DO	Step 4 Improve	Objective: Develop and implement countermeasures to eliminate the verified root causes of the problem.
		10. Potential causes most likely to have the greatest impact on the problem were selected. ✓
		11. A relationship between the root causes and the problem was verified with data. ✓
		12. The impact of each root cause on the gap was determined. ✓
	Step 5 Control	Objective: Confirm that the countermeasures taken impacted the root causes and the problem; and that the target has been met.
		13. Countermeasures were selected to address verified root causes. ✓
		14. The method for selecting the appropriate countermeasures was clear and considered effectiveness and feasibility. ✓
		15. Barriers and aids were determined for countermeasures worth implementing. ✓
CHECK	Step 4 Improve	Objective: Confirm that the countermeasures taken impacted the root causes and the problem; and that the target has been met.
		16. The action plan reflected accountability and schedule. ✓
		17. The effect of countermeasures on the root causes was demonstrated. ✓
		18. The effect of countermeasures on the problem (or indicator) was demonstrated. ✓
	Step 5 Control	Objective: Prevent the problem and its root causes from recurring. Maintain and share the gains.
		19. The improvement target was achieved and causes of significant variation were addressed. ✓
		20. The effect of countermeasures on the indicator representing the stakeholders' need was demonstrated. ✓
		21. A method was established to document, permanently change, and communicate the revised process or standard. ✓
ACT	Step 5 Control	Objective: Evaluate the team's effectiveness and plan future activities.
		22. Responsibility was assigned and periodic checks scheduled to ensure compliance with the revised process or standard. ✓
	Step 5 Control	Objective: Evaluate the team's effectiveness and plan future activities.
		23. Specific areas for replication were identified. ✓
Step 5 Control	Objective: Evaluate the team's effectiveness and plan future activities.	
	24. Any remaining problems (or gaps) were addressed. ✓	
Step 5 Control	Objective: Evaluate the team's effectiveness and plan future activities.	
	25. Lessons learned, P-D-C-A of the Story process, & team growth were assessed & documented. ✓	

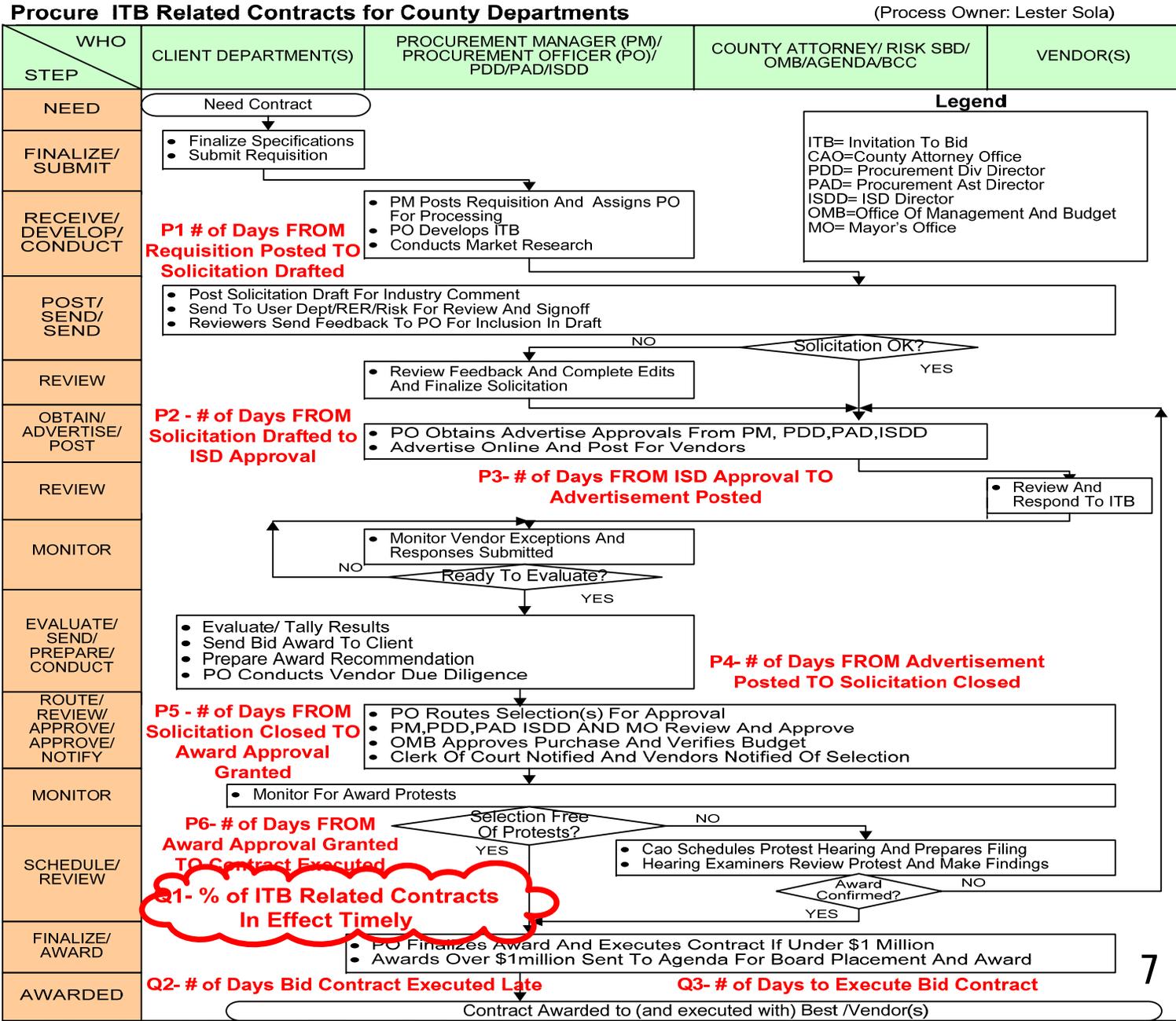
- Team identified an indicator; developed a Flowchart and a Spreadsheet
- Histograms, Paretos, Flowchart
- Single Case Bore; Fishbone ; RC Verification Matrix
- Countermeasures Matrix; Barriers and Aids; Action Plan
- Line Graph
- Process Flowchart; Process Control Chart
- Lessons Learned



Review Process Flow Chart

The team constructed a Process flow chart describing the Process.

The team next looked closer how to capture indicator data.



Hidden Costs of Late ITB Related Contracts

The team identified info on costs of late ITB related Contracts

	<u>Annual Cost</u>
1. Issuing extensions to modify existing contracts for additional time and proration of funds where permitted.....	\$158,484
2. Identify, access, and award alternate contract source for required goods/services for contracts with no extension authority.....	\$30,723
3. Establish emergency bridge contract for continuity of services until new ITB is awarded.	\$90,000
4a. Establish non-competitive contract for continuity while new ITB is awarded under \$100K. (Phase 1 = Threshold Determination).....	\$178,694
4b. Establish non-competitive contract for continuity while new ITB is awarded under \$100K. (Phase 2 = Negotiations and Award)	\$306,957
5a. Establish non-competitive contract for continuity while new ITB is awarded under \$100K. (Phase 1 = Threshold Determination)	\$76,040
5b. Establish non-competitive contract for continuity while new ITB is awarded under \$100K. (Phase 2 = Negotiations and Award)	\$188,800

Hidden Costs = \$1,029,697

See Appendix for detail Analysis



Identify Data Collection Needs

The team developed a data collection spreadsheet...

Miami-Dade Contract Procurement Status Summary

BCB	DEMOGRAPHICS										MILESTONE DATES													
	CONTRACT INFORMATION						CLIENT ORGANIZATION INFO				N	O	P	Q	S	T	U	V	W	X	Y	Z	AA	AB
	B	C	D	E	F	G	H	I	J	K														
Line #	Internal Control Number	Contract Name	BID Type	Contract Amt (\$)	Cumulative Value (\$)	Goods or Service ?	Rejected or Cancelled?	Agent Name	Dept	Ultimate Authority to Approve	1- Requestion Posted Date	Day	2- Solicitation Drafted Date	Day	3- ISD Approved Date	Day	4 Advertisement Posted Date	Day	5- Solicitation Closed Date	Day	6- Award Approval Granted Date	Day	7- Contract Effective Date	Day
				Avg	%Goods	%Rjtd					%Mo		%Mo		%Mo		%Mo		%Mo		%Mo		%Mo	
				\$19,000	\$62,333	66.7	50.0				0.0		0.0		0.0		0.0		0.0		33.3		33.3	
1	CA-3	Electroni	D	\$ 12,000	\$ 52,000	Goods	Cancel	Jack	D	Dir	6/2/09	Tu	6/20/09	Sa	6/26/09	Fr	6/30/09	Tu	8/21/09	Fr	8/23/09	Su	9/1/09	Tu
2	CA-1	Repair V	A	\$ 5,000	\$ 45,000	Services	Rejec	Jim	A	Dir	10/9/09	Fr	10/21/09	We	10/27/09	Tu	10/27/09	Tu	11/8/09	Fr	11/8/09	Su	11/9/09	Mo
3	CA-2	Vehicles	C	\$ 40,000	\$ 90,000	Goods		Tom	C	Deputy M	6/21/09	Su	6/26/09	Fr	7/10/09	Fr	8/11/09	Tu	8/20/09	Th	8/24/09	Mo	8/26/09	We

DURATION								OUTCOMES		EB
AC= P-N	AD= S-P	AE= U-S	AF= W-U	AG= Y-W	AH= AA-Y	AI= AA-N	AN	AO= AI-90	AP='Y' if AO<=0	
Rqn Posted TO Solictn Drafted	Solicitn Drafted TO ISD Appvl	ISD Appvl TO Advsm Posted	Advsm Posted TO Forward Mgt Appv	Forward Mgt Appv TO Award Recom	Award Recom TO Contract Approved	Reqn Posted TO Contract Approved	Standard	# of Days Contract Executed Late	Contract Awarded On-Time?	
Avg # of Days									%Y	
13.7	19.8	3.8	71.9	60.7	-1.6	163.8	120.0	43.8	32.5	
P1	P2	P3	P4	P5	P6	Q3		Q2	Q1	
7	12	0	9	13	0	41	120	-79	Y	
1	0	1	33	28	-22	41	120	-79	Y	
0	4	2	13	24	0	43	120	-77	Y	

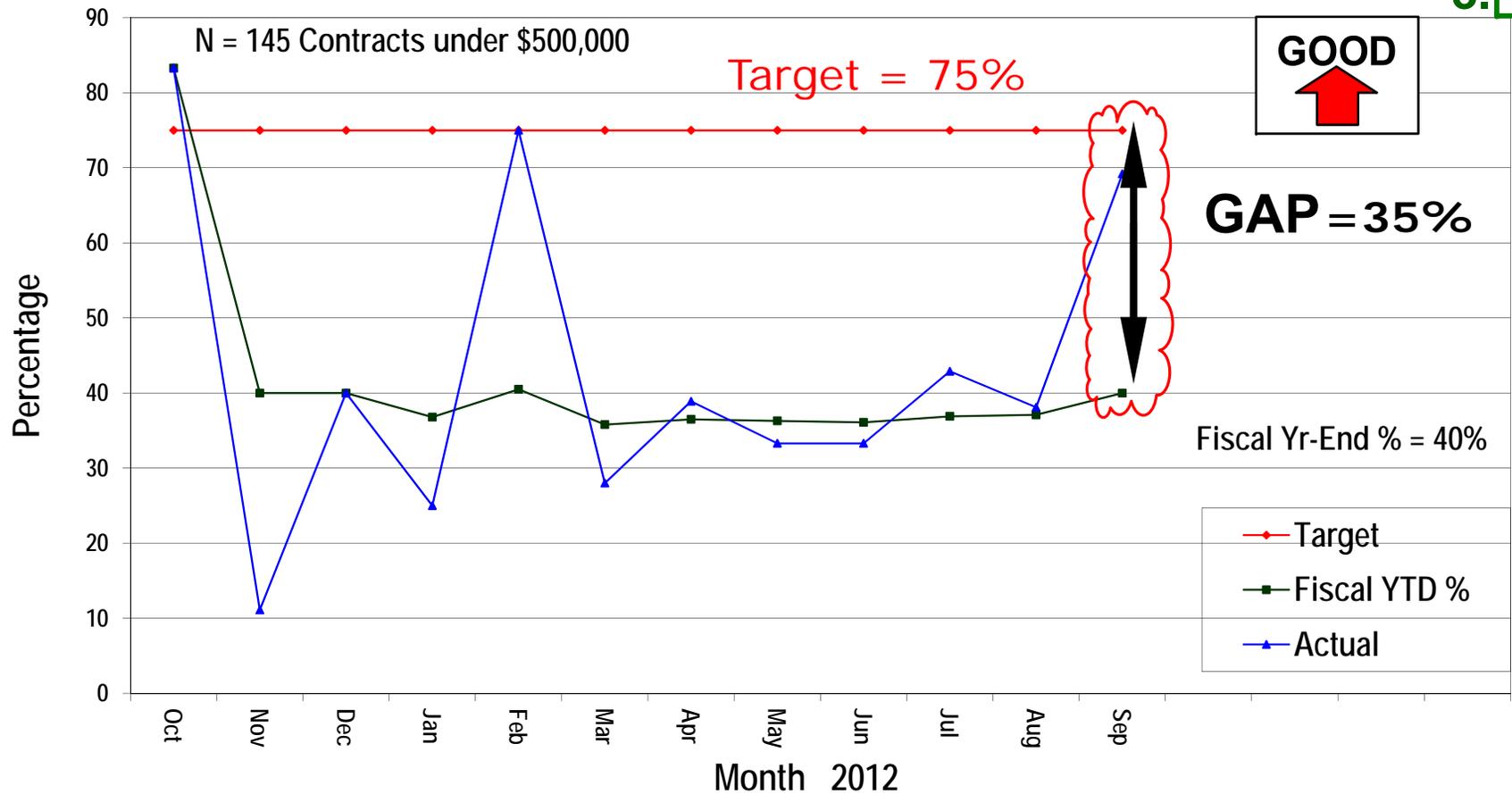


Review Selected Indicator

The team collected Q1 indicator data and reviewed performance trends:

Q1- % of ITB Related Contracts (under \$500K) In Effect Timely

3.

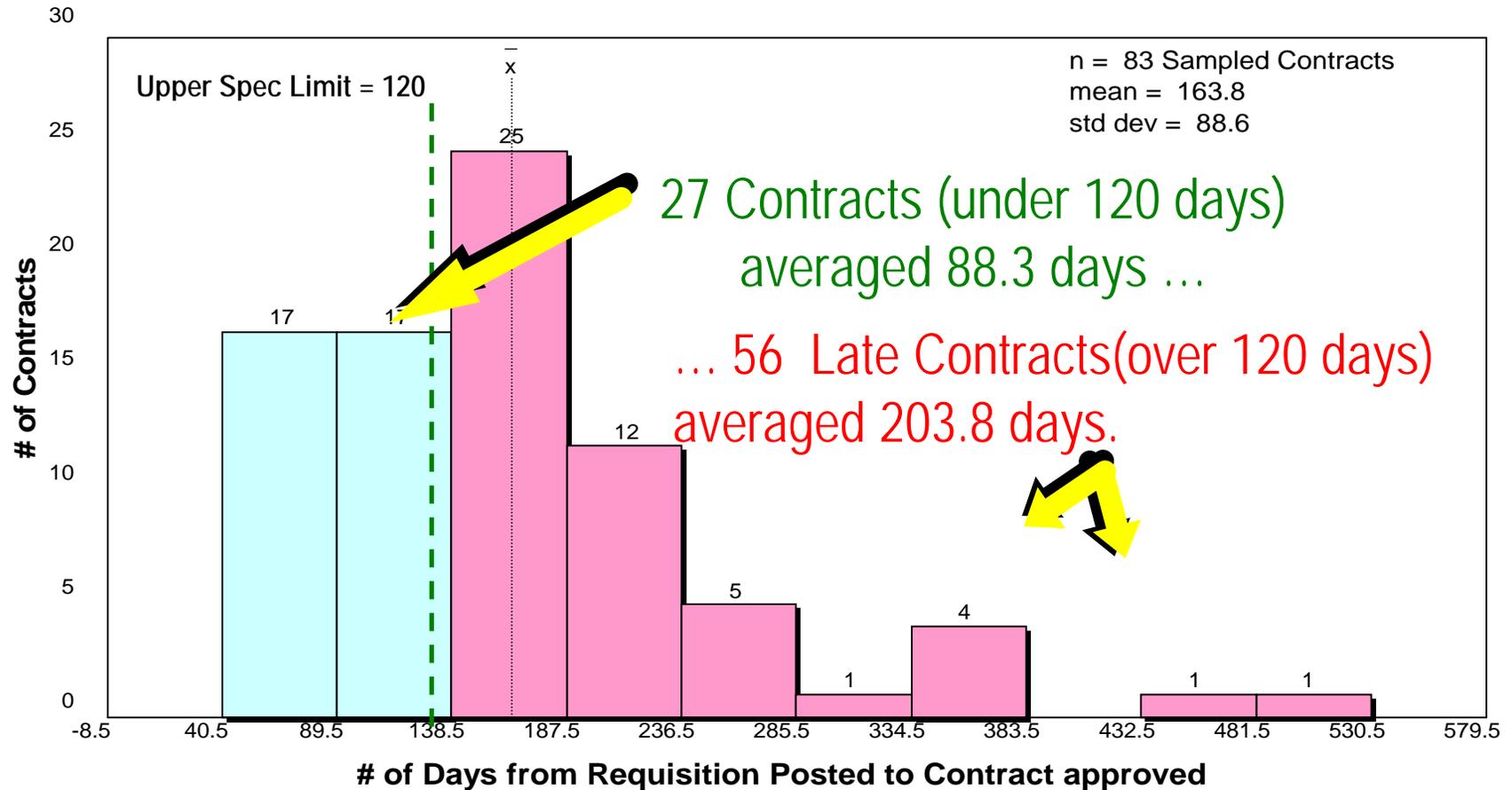


The team next looked closer at the Gap.

Stratify the Problem

The team stratified 12 months of Executed Contracts using a histogram and found...

ITB Procurement Requests (less than \$500,000) resulting in Contracts Effective from Oct 2011 thru Sep 2012



The team looked closer at comparing the **Late** to the **Timely** Contracts.

Stratify the Problem

The team compared the **LATE Contracts** to the **TIMELY Contracts** and found...

Procure ITB Contracts

56 Late Contracts	27 On-time Contracts	Difference	CLIENT	PROCUREMENT/ ISD	COUNTY ATTNY/ RISK/ OMB	VENDORS
			Need ITB Contract			
20.6	-.6	21.2	<ul style="list-style-type: none"> Rec Request Draft Solicitation 			
21.2	16.9	4.3	<ul style="list-style-type: none"> Approve Solicitation 			
4.6	2.0	2.6	<ul style="list-style-type: none"> Post Bid 			
88.4	34.0	54.4	<ul style="list-style-type: none"> Bid Closing 			
			<ul style="list-style-type: none"> Close Solicitation 			
70.3	38.3	32.0	<ul style="list-style-type: none"> Evaluate Proposals Approve Contractor Grant Award 			
-1.3	-2.3	1.0	<ul style="list-style-type: none"> Execute Contract 			
203.8	88.3	115.5	Contract In Effect			

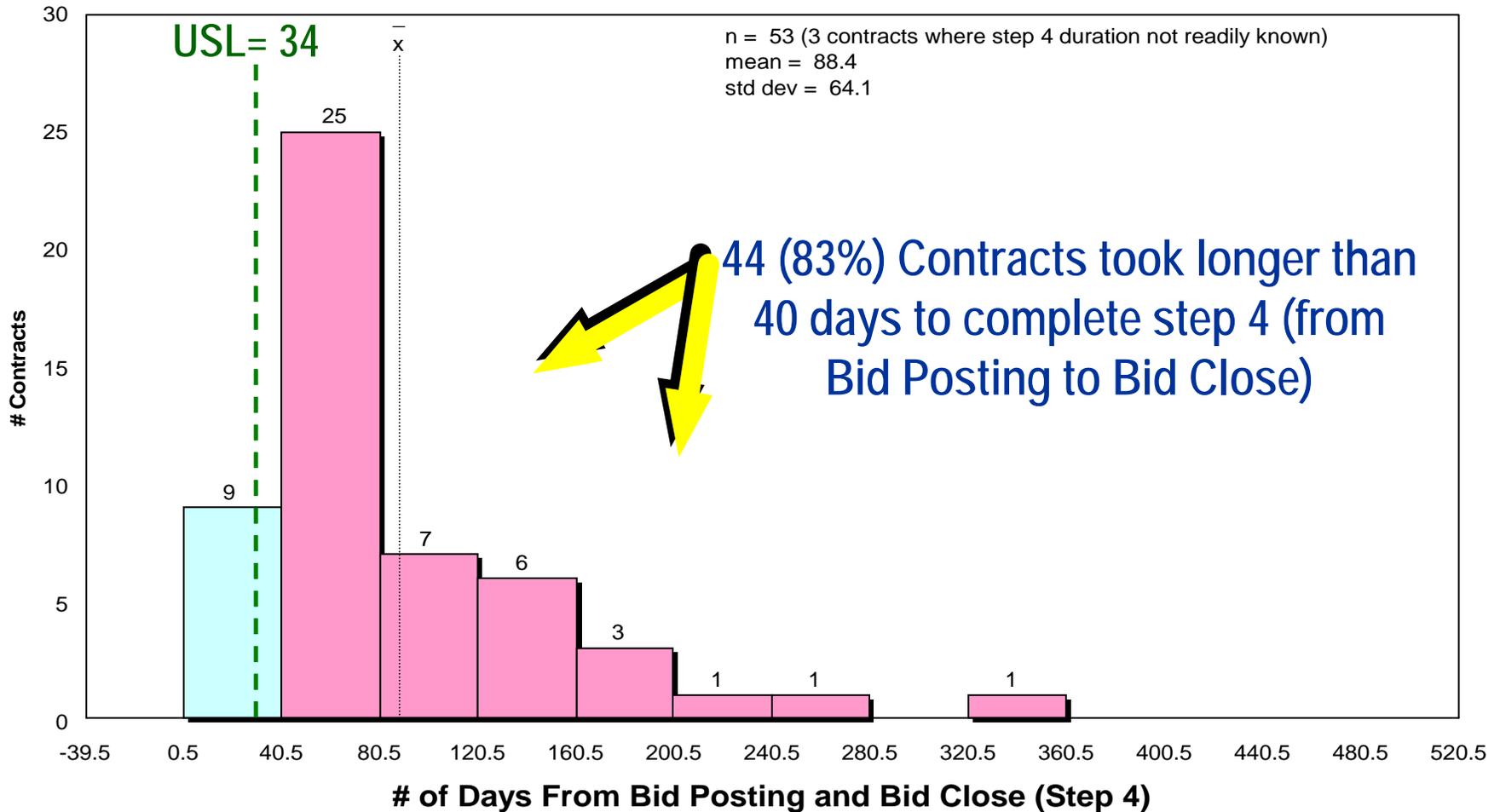


The team looked 1st more closely at the 56 LATE Contracts in **step 4: Bid Posting to Bid Closing** that averaged 88.4 days in that step.

Stratify the Problem

The team stratified the 56 late contracts for step 4 and found...

ITB Procurement Requests (less than \$500,000) resulting in Contracts Effective from Oct 2011 thru Sep 2012 Averaged 88.4 days in Step 4



The team looked closer at these 44 Contracts.

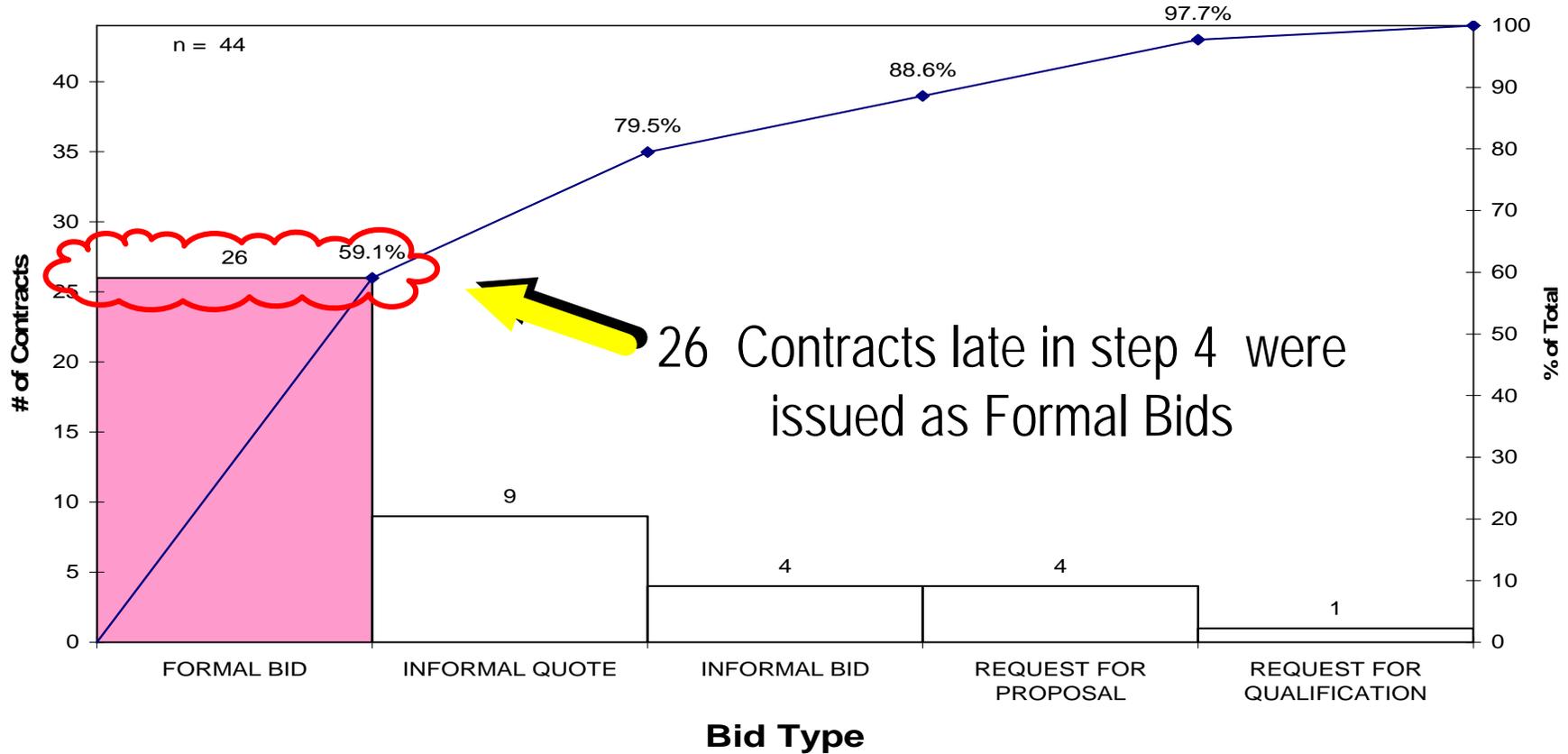


Stratify the Problem (Continued)

The team stratified the 44 Late Contracts many ways and found...

5.,6.,7.,8. 

ITB Procurement Requests (less than \$500,000) resulting in Contracts Effective from Oct 2011 thru Sep 2012 took longer than 40 days in Step 4



Problem Statement: *"26 ITB Procurement Requests (less than \$500,000), resulting in Contracts Effective from Oct 2011 thru Sep 2012, took longer than 40 days from Bid Posting to Bid Closing and were issued as Formal Bid"*

Identify Potential Root Causes

The team sampled 26 ITB Contracts and performed Single Case Bore analysis for ITB Process Step 4. The team also found, and included, several delay factors for Step 5.

Single Case Bore Analysis

Problem Statement: "26 ITB Procurement Requests (less than \$500,000), resulting in Contracts Effective from Oct 2011 thru Sep 2012, took longer than 40 days from Bid Posting to Bid Closing and were issued as Formal

Reasons or Factors <i>(That possibly contributed to delays from Bid Posting to Bid Closing)</i>	26 Formal Bid Contracts																										Total	Percentage
	9231-0/18	8073-1/20	5504-0/17	7312-1/22	9513-0/12	8008-0/12	7760-0/16	7607-1/18	6543-1/18	9533-0/12	9566-PR	7778-4/11	9561-0/13	9524-0/16	6483-4/17	8043-2/15	1981-1/16	9630-0/18	7798-0/16	9540-2/17	4512-1/16	8734-1/21	1067-1/14	8800-0/17	9629-2/21	8368-0/16		
1) Extended Bid time C	x	x	x	x	x	x	x	x	x	x			x							x	x					x	11	42%
2) Slow receiving Answers to Vendor Questions		x																			x						2	8%
3) Evaluation Period B	x	x	x	x								x		x	x	x		x		x	x	x	x	x	x	13	50%	
4) Approval Process / Award A		x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	22	85%	
5) Vendor Delays	x													x	x						x					4	15%	
6) Client Department Delays				x			x											x								3	12%	
7) Improper Staff Training	x													x	x											3	12%	
8) Contract/Staff Reassignments D	x				x	x				x				x	x										x	7	27%	
9) Approval Process / Advertisement		x	x		x			x	x					x										x	x	8	31%	
10) Negotiations with Vendor(s)																		x								1	4%	
11) Scope Development												x									x					2	8%	

The team next looked closer at these factors.



Identify Potential Root Causes

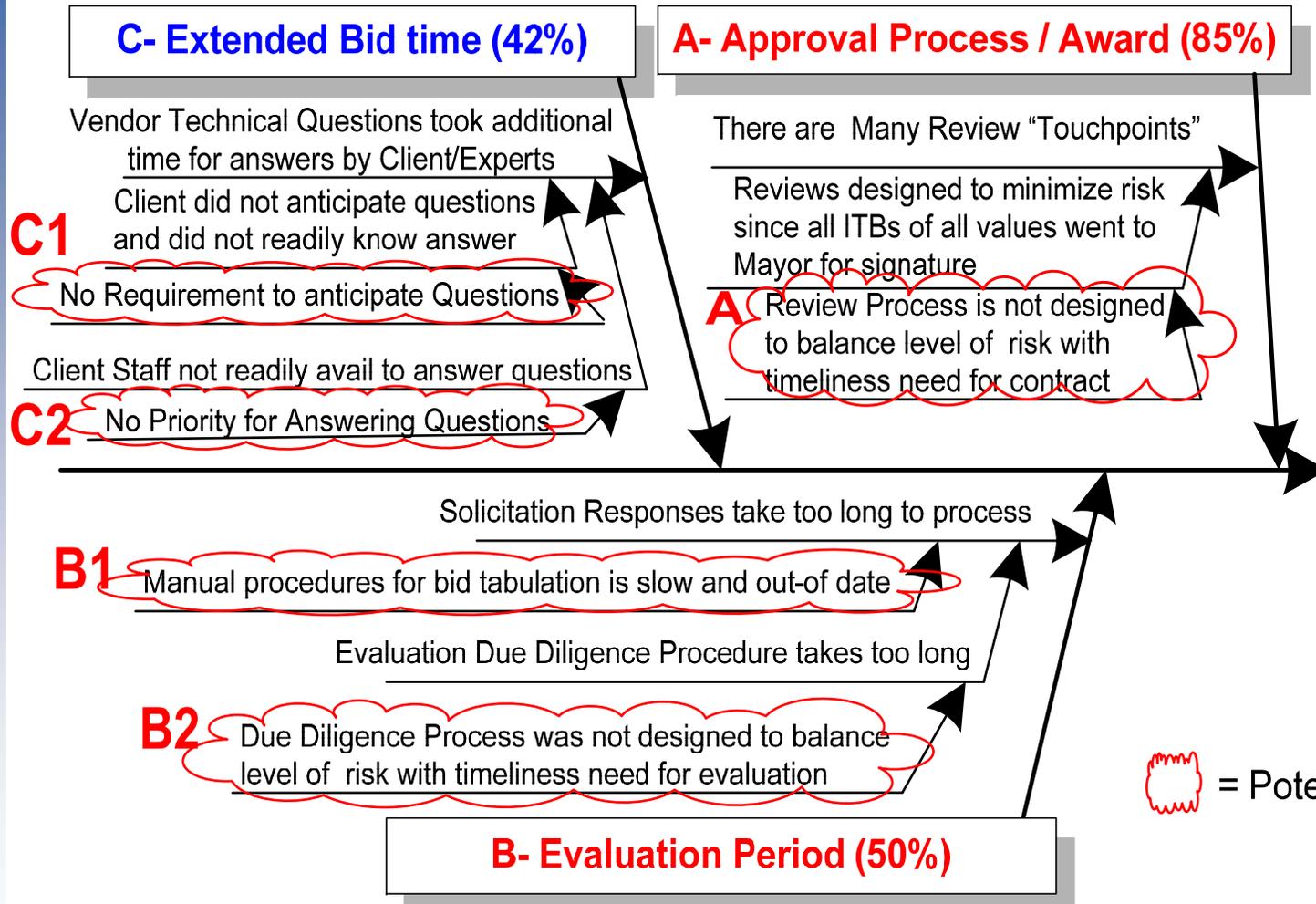
The team modified the Problem Statement and completed the Fishbone Analysis ...

9.,10.

Fishbone Cause and Effect Diagram

Modified Problem Statement

"26 ITB Procurement Requests (less than \$500,000), resulting in Contracts Effective from Oct 2011 thru Sep 2012, took longer than 40 days for Bid Step 4 (and Evaluation/ Approval Step 4) and were issued as Formal Bid"



The team next looked to verify these 5 Potential Root Causes.

Verify Root Causes

The team collected data to verify the root causes and found.... 11.,12. 

Root Cause Verification Matrix		
Potential Root Cause	How Verified?	Root Cause or Symptom
A Review Process is not designed to balance level of risk with timeliness need for contract	Team reviewed the Procedures for Approval Reviews and interviewed staff and found.... No written procedures that balance level of risk and timeliness of approval needed Melissa	 Root Cause
B1 Manual procedures for bid tabulation is slow and out-of date	Team Verified Input is manual <i>In-Progress</i>	 Root Cause
B2 Due Diligence Process was not designed to balance level of risk with timeliness need for evaluation	Team reviewed the Evaluation Due Diligence Procedures and found.... No variation for level of risk in contract or \$ amount - Melissa	 Root Cause
C1 No Requirement to anticipate Questions	Team reviewed the ITB Client Procedures and found.... No written procedures that anticipate questions Miriam	 Root Cause
C2 No Priority for Answering Questions	Neivy interviewed clients and found no written policy to place priority on answering questions	 Root Cause

...all five (5) were validated as root causes.

Identify and Select Countermeasures

13.,14. ✓

The team brainstormed many countermeasures and narrowed them down to these for evaluation:

Countermeasures Matrix						
Problem Statement	Verified Root Causes	Countermeasures	Legend:			
			3=Moderately		2=Somewhat	
			5=Extremely		4=Very	
Ratings				Overall	Take Action? Yes/No	
Effectiveness	Feasibility					
<p>"26 ITB Procurement Requests (less than \$500,000), resulting in Contracts Effective from Oct 2011 thru Sep 2012, took longer than 40 days for Bid Step 4 (and Evaluation/ Approval Step 4) and were issued as Formal Bid"</p>	<p>A - Review Process is not designed to balance level of risk with timeliness need for contract</p>	<p>A1- Create Approval Matrix for ITB Contracts matching Risk and Dollar Thresholds to # of Approval Touchpoints- (promote Delegation of Authority for some Contract approvals to Managers and reduce "low value" Touchpoints)</p>	5	3	15	Y
	<p>B1 - Manual procedures for bid tabulation is slow and out-of date</p>	<p>B1- Purchase and implement an electronic Bidding tool (ISD)</p>	4	5	20	Y
	<p>B2 - Due Diligence Process was not designed to balance level of risk with timeliness need for evaluation</p>	<p>B2- Revise Due Diligence Process and Checklist to allow for low value steps to be eliminated or more quickly completed</p>	3	3	9	Y
	<p>C1- No Requirement to anticipate Questions</p>	<p>C1- Establish Standard for anticipating Questions</p>	2	5	10	Y
	<p>C2 - No Priority for Answering Questions</p>	<p>C2- Establish a standard for turnaround time on answering Technical Questions and escalation process if delayed</p>	4	4	14	Y

The team selected 5 countermeasures for implementation.



Identify Barriers and Aids

The team performed Barriers and Aids analysis on the selected Countermeasures.

What: Implement Countermeasures To Reduce Time to Procure ITB Contracts				
Barriers			Aids	
Impact (H, M, L)	Forces against Implementation		Forces For Implementation	
M	1)	Fiscal Budget is limited <i>(Supported by Aid:A,B)</i>	A)	Management Very Supportive
L	2)	Possible Staff Pushback on changes <i>(Supported by Aid:A,B)</i>	B)	Significant Project Savings and Benefits to Process Customers

The team next sought to incorporate this analysis into the team’s Action Plan.

Develop and Implement Action Plan

Legend:
 ■ = Actual
 □ = Proposed

The team implemented an Action Plan for the team's Countermeasures.

16.

WHAT: Implement Countermeasures to Reduce Time to Procure ITB Contracts

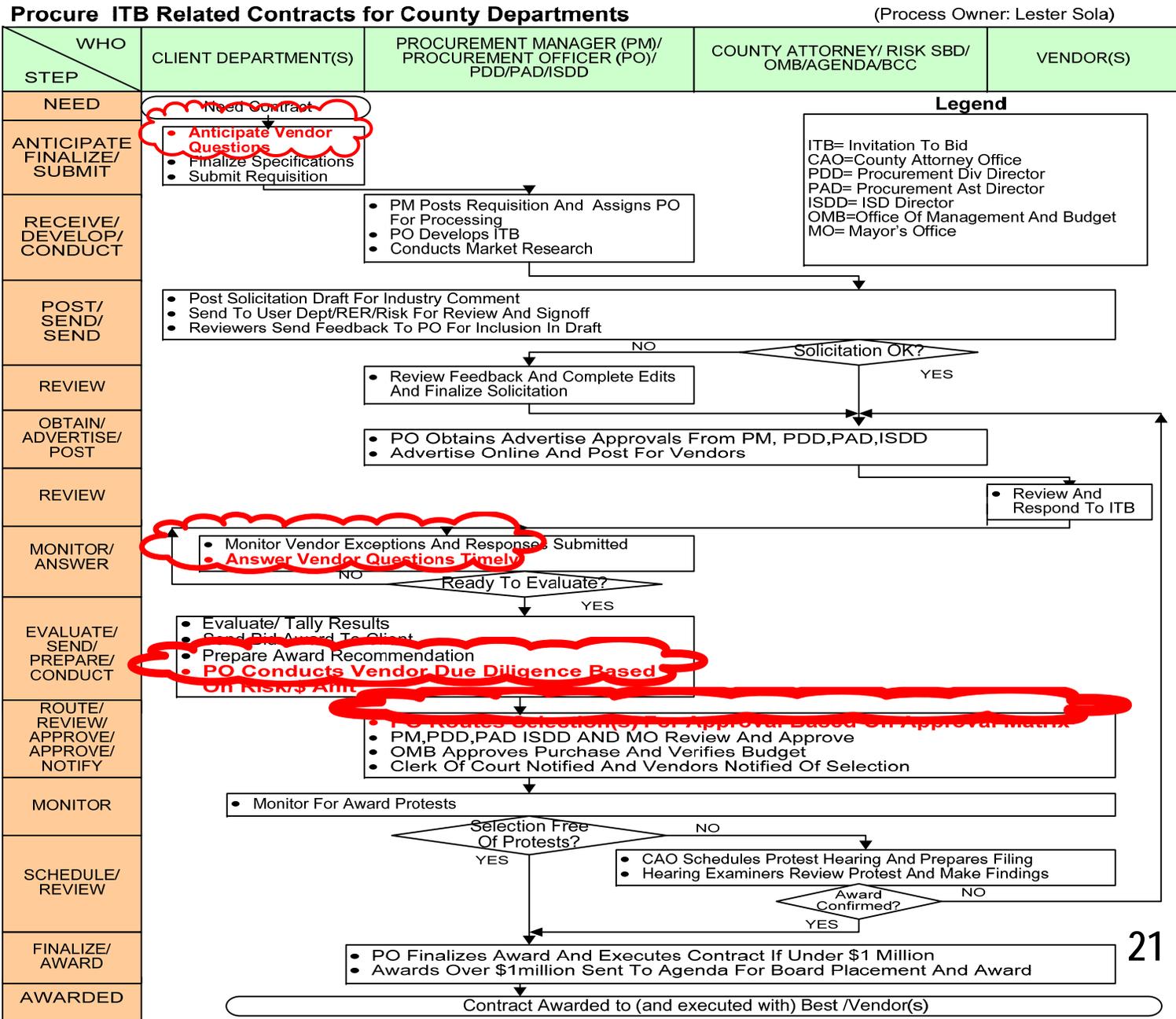
HOW	WHO	WHEN									
		2012	2013								
		Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
1. Develop Countermeasures:											
A1- Create Approval Matrix for ITB Contracts matching Risk and Dollar Thresholds to # of Approval Touchpoints	Miriam/ Lester	■	□	2/1/13							
B1- Purchase and implement an electronic Bidding tool (ISD)	Lester	■	□	1/20/13							
B2- Revise Due Diligence Process and Checklist to allow for low value steps to be eliminated or more quickly completed	Miriam/ Mike	■	□	2/1/13							
C1- Establish Standard for anticipating Questions	Melissa/ John/Neivy	■	□	2/1/13							
C2- Establish a standard for turnaround time on answering Technical Questions and escalation process if delayed	Melissa/ John/Neivy	■	□	2/1/13							
2. Secure Management Approval of Countermeasures (share benefits and cost savings)	Team			□	3/1/13						
3. Communicate/Train ISD Staff in Countermeasures and related policies/procedures (share benefits and cost savings)	Team			□	3/31/13						
4. Implement Countermeasures and Pilot Countermeasures	Team			□	4/30/13						
5. Review Pilot and determine Benefits and adjust as necessary and present results to management	Team					□	5/31/13				
6. Establish On-going responsibilities and standardize countermeasures into operations	Process Owner							□	On-going		

Standardize Countermeasures

21.,22.,23. ✓

The team incorporated the improvements into the Process.

The team looked ahead to the future.



Implement Process Control System

21.,22.,23. 

The team developed a Process Control System to better monitor the process on-going.

Process Control System						
Process Name: Procure ITB Related Contracts for County Departments			Process Owner: Lester Sola			
Process Customer: All County Departments			Critical Customer Requirements: Timeliness of Procuring Contracts			
Process Purpose: Process Invitation to Bid (ITB) requests and procure contract			Current Sigma Level: TBD		Outcome Indicators: Q1, Q2, Q3	
Process and Quality Indicators			Checking / Indicator Monitoring			Contingency Plans / Misc. • Actions Required for Exceptions • Procedure References
Process Indicators	Control Limits	Data to Collect	Timeframe (Frequency)	Responsibility		
And						
Quality Indicators	Specs/ Targets	What is Checking Item or Indicator Calculation	When to Collect Data?	Who will Check?		
P1	# of Days FROM Requisition Posted TO Solicitation Drafted	2 days	(date Solicitation Drafted)- Date Requisition Posted)	By Event	Lester Sola	• Procurement Date Base system
P2	# of Days FROM Solicitation Drafted to ISD Approval	15 Days	Date Drafted by ISD)- (Date Solicitation Drafted)	By Event	Lester Sola	• Procurement Date Base system
P3	# Days FROM ISD Approval TO Advertisement Posted	2 Days	(Date Advertisement Posted)- (Date ISD Approval)	By Event	Lester Sola	• Procurement Date Base system
P4	# of Days FROM Advertisement Posted TO Forward for Mgmt Approval	15 Days	(date Foresrd to Mgmt Approval)- (Date Advertisement Posted)	By Event	Lester Sola	• Procurement Date Base system
P5	# of Days FROM Forward to Mgmt Approved TO Award Recommended	30 Days	(Date Award recommended)- (Date Forward to Mgmt Approved)	By Event	Lester Sola	• Procurement Date Base system
Q1	% of ITB Related Contracts Approved Timely	75%	100*(# of ITB Related Contracts Approved Timely)/(# approved)	Monthly	Lester Sola	• Procurement Date Base system
Q2	# of Days Bid Contract Executed Late	0	120-[(Date Contract Executed) -(Date Request Posted)]	By Event	Lester Sola	• Procurement Date Base system
Q3	# of Days to Execute Bid Contract (from Request Posted)	120 days	(Date Contract Executed)- (Date Request Posted)	By Event	Lester Sola	• Procurement Date Base system

Approved: _____ Date: _____ Rev #: _____ Rev Date: _____

The team looked ahead to the future.



Lessons Learned

- 1) The DMAIC Process with it's Tools and Techniques (i.e. Paretos, Flowcharts, etc.) were Very Effective** *in helping the team see the problem clearly and follow data to identify and address the Root Causes.*
- 2) Data Integrity is very important** *as the teams analyze problems. Incorrect dates, for example, painted an incorrect picture until discovered during the Single Case Bore Analysis.*

Next Steps

- 1) Look at the Advertisement step for further improvements to the Procurement process.**

Procurement Pilot

Delegate advertisement authority to procurement contracting managers for solicitations of all value.

- As of December 13, 2012, advertisement authority was delegated to procurement managers for solicitations of all value.
- This pilot has yielded an average overall savings of one week off the entire cycle time.
- FY2012-2013 = Average Processing Time Solicitations < \$500k
 - Q1 (October – December) = 125 days for 33 awarded contracts
 - Q2* (Partial Jan-Feb) = 118 days for 23 awarded contracts

Delegation of advertisement authority is averaged to save two weeks between project initiation from the user department and advertisement of the solicitation.

YEAR OVER YEAR AVERAGE CYCLE TIME COMPARISON

FY 2011-2012 Q1 = 141 days

FY 2012-2013 Q1 = 125 days

FY 2011-2012 Q2 = 164 days

FY 2012-2013 Q2 = 118 days

Recommended Improvements

What can and will we do better?

- Capture additional data pertaining to “project initiation” to account for the work being conducted on the front end between PM and user departments.
- Reassess and re-establish new measures and goals for procurement cycle times.

Processing Time Target Goals FY2012-2013 "As-Is"	
ITB Solicitation Value	Cycle Time Goal
Up to \$500k	120 days
\$500k - \$1million	186 days
Over \$1 million	300 days

Processing Time Target Goals FY2012-2013 "Recommended"	
ITB Solicitation Value	Cycle Time Goal
Up to \$250k	90 days
Up to \$500k	120 days
\$500k - \$1million	180 days
Over \$1 million	260 days

- Conduct outreach training with user departments to improve technical specification and scope writing.
- Implement additional measures for award of solicitations of all values to be issued within three days of the award recommendation being filed.
- Implement lessons learned on solicitations of all values and methods.

Recommended Improvements Continued

- Revise our approval processes, procedures, and delegation matrix to better assess risk to speed up the process.
- Amend Section 2-8.1 (b) of the Miami-Dade County Code to increase the Mayor's delegated authority to award and reject bids or proposals for the purchase of supplies, materials or services (other than professional services) from up to \$1 million to up to \$5 million.

Current Delegation Matrix

ACTION	Board of County Commissioners (Board)	Mayor	Director Internal Services Department
Advertise Solicitations	- No approval required per County Code Section 2-8.1	- No approval required per County Code Section 2-8.1	- Authorization for all values per County Code Section 2-8.1
Competitively Awarded Contracts	- Approval required for values greater than \$1 million per County Code Section 2-8.1 A.O. 3-38	- Authorization for values over \$500,000 up to \$1 million per County Code Section 2-8.1 and A.O. 3-38.	- Authorization for values up to \$500,000 per A.O. 3-38
Bid Waiver and Sole Source Purchases	- Approval required for values greater than \$250,000 per County Code Section 2-8.1 A.O. 3-38	- No authorization required. - All values greater than \$250,000 require Mayor's recommendation to the Board to waive competitive bidding.	- Authorization for bid waivers and sole source purchases up to \$250,000 per A.O. 3-38
Emergency Purchases	- Ratification required for all Emergency Purchases over \$250,000 per A.O. 3-38	- No ratification authorization required.	- Authorization for all values up to \$250,000 provided the <u>Director of the user department</u> certifies the emergency per A.O. 3-38
Modifications to Contracts that were not competitively awarded: 1. Bid Waiver or Sole Source Purchases of all values	- Approval required when modification increases contract value to more than \$100,000 - Approval required when modification increases by more than 20% if contract value is greater than \$100,000 per A.O. 3-38.	- No authorization required.	- Authorization for established contracts valued less than \$100,000 when the modification does not exceed \$100,000 regardless of percentage change. - Authorization for BCC approved contracts valued over \$100,000 when the modification does not exceed 20 percent per A.O. 3-38
Modifications to Contracts that were competitively awarded: 1. Competitive Awarded Contracts under the County Manager's Authority (Under \$1 million) 2. Board Awarded Contracts (Over \$1 million)	- Approval required when modification increases contract value to more than \$1 million - Approval required when modification increases by more than 20% if contract value is greater than \$1 million per A.O. 3-38	- Authorization for BCC approved contracts valued over \$1 million when modification does not exceed 20 percent.	- Authorization for established contracts valued less than \$500,000 when the modification does not exceed \$500,000 regardless of percentage change. - Authorization for Mayor approved contracts valued between \$500,000 and \$1 million when the modification does not exceed \$1 million regardless of percentage change per A.O. 3-38



Recommended - Delegation Matrix

TYPE OF ACTION	ALL VALUES	APPROVAL AUTHORITY
Advertisement	All Values	PM Managers
Supplemental Agreements (Continuity)	All Values	PM Managers
Contract Modifications (re: Additional/Added Services, LW, Cycles, etc.)	Up to \$250K Up to \$500K Over \$500K	PM Division Director PM Assistant Director ISD Director
Contract Modifications (re: All Successor Contracts)	All Values	ISD Director
Rejections	Up to \$250K Up to \$500K Up to \$1M Over \$1M	PM Managers PM Division Director PM Assistant Director ISD Director
Competitive Awards	Up to \$250K Up to \$500K Up to \$1M Over \$1M up to \$2.5M Over \$2.5M to \$5 M Over \$5M	PM Managers PM Division Director PM Assistant Director ISD Director Mayor Board of County Commissioners
Non-Competitive Awards	Up to \$150K Up to \$250K Over \$250K	PM Assistant Director ISD Director Board of County Commissioners
Pre-Award Site Visits - (First Time)	Over \$500K only (exceptions considered)	PM Managers / Contracting Officers
Market Research for OTRs	Over \$250K only - (6 month pilot)	PM Managers / Contracting Officers
Pre-Advertisement Bid Review	Renewals – Two Weeks New Purchases – One Week	Contracting Officers / Client Departments
Post-Advertisement Bid Review	Only when Technical spec. issue e.g. ("or equal") is a consideration – Two weeks	Contracting Officers / Client Departments



Closing Remarks

- We strongly feel that the impact of the proposed recommendations will yield:
 - ✓ Reduction in the time required to complete procurement solicitations;
 - ✓ Overall improvement of the procurement process;
 - ✓ Increased client satisfaction.

Thank you for your time and consideration.



Appendix-Hidden Cost 1 of 3

1. Issuing extensions to modify existing contracts for additional time and proration of funds where permitted.

Personnel Involved	Initiator (I)/ Approver	Estimated # of Hours to complete task	Avg. Hourly	Frequency of	Total Cost
	(A)/Quality Control (QC)/ End User (U)		Rate Per Position	occurrence over Fiscal Year	
PCO	I	3	\$ 35.00	145	\$ 15,225
Vendor	A	1	\$ -		\$ -
PM Manager	A	2	\$ 59.00		\$ 17,110
PM Division Director	A	2	\$ 74.00		\$ 21,460
ISD Assistant Director	A	2	\$ 97.00		\$ 28,129
ISD Director	A	2	\$ 114.00		\$ 33,060
Vendor Assistance	QC	7	\$ 35.00		\$ 35,525
Client Department	U	1	\$ 55.00		\$ 7,975
		20			\$ 158,484

2. Identify, access, and award alternate contract source for required goods/services for contracts with no extension authority.

Personnel Involved	Initiator (I)/ Approver	Estimated # of Hours to complete task	Avg. Hourly	Frequency of	Total Cost
	(A)/Quality Control (QC)/ End User (U)		Rate Per Position	occurrence over Fiscal Year	
PCO	I	16	\$ 35.00	11	\$ 6,160
Client Department	I	8	\$ 55.00		\$ 4,840
Vendor	I / A	6	\$ -		\$ -
Small Business Review	A	2	\$ 38.00		\$ 836
PM Manager	A	4	\$ 59.00		\$ 2,596
PM Division Director	A	3	\$ 74.00		\$ 2,442
ISD Assistant Director	A	2	\$ 97.00		\$ 2,134
Asst. to Director	A	2	\$ 75.00		\$ 1,650
ISD Director	A	2	\$ 114.00		\$ 2,508
Asst. to Mayor	A	2	\$ 57.00		\$ 1,254
Mayor	A	2	\$ 84.00		\$ 1,848
Vendor Assistance	QC	10	\$ 35.00		\$ 3,850
Client Department	U	1	\$ 55.00		\$ 605
		60			\$ 30,723

Appendix-Hidden Costs 2 of 3

3. Establish emergency bridge contract for continuity of services until new ITB is awarded.

Personnel Involved	Initiator (I)/ Approver (A)/Quality Control (QC)/ End User (U)	Estimated # of Hours to complete task	Avg. Hourly Rate Per Position	Frequency of occurrence over Fiscal Year	Total Cost
Client Department	I	8	\$ 55.00	45	\$ 19,800
PCO	I	16	\$ 35.00		\$ 25,200
Small Business Review	A	2	\$ 38.00		\$ 3,420
Vendor	I / A	6	\$ -		\$ -
PM Manager	A	3	\$ 59.00		\$ 7,965
PM Division Director	A	2	\$ 74.00		\$ 6,660
ISD Assistant Director	A	2	\$ 97.00		\$ 8,730
Vendor Assistance	QC	10	\$ 35.00		\$ 15,750
Client Department	U	1	\$ 55.00		\$ 2,475
		50			\$ 90,000

4. Establish non-competitive contract for continuity while new ITB is awarded under \$100K.

Phase 1 = Threshold Determination Phase 2 = Negotiations and Award

Personnel Involved	Initiator (I)/ Approver (A)/Quality Control (QC)/ End User (U)	Estimated # of Hours to complete Task	Avg. Hourly Rate Per Position	Frequency of occurrence over Fiscal Year	Total Cost
Client Department	I	40	\$ 55.00	47	\$ 103,400
PCO	I	30	\$ 35.00		\$ 49,350
Vendor	I / A	1	\$ -		\$ -
PM Manager	A	5	\$ 59.00		\$ 13,865
PM Division Director	A	3	\$ 74.00		\$ 10,434
Vendor Assistance	QC	1	\$ 35.00		\$ 1,645
	Phase 1 Sub-total:	80			\$ 178,694
Client Department	I/A	25	\$ 55.00	47	\$ 64,625
PCO	I/A	50	\$ 35.00		\$ 82,250
Vendor	A	30	\$ -		\$ -
Small Business Review	A	2	\$ 38.00		\$ 3,572
PM Manager	A	16	\$ 59.00		\$ 44,368
County Attorney	A	6	\$ 135.00		\$ 38,070
PM Division Director	A	4	\$ 74.00		\$ 13,912
ISD Assistant Director	A	2	\$ 97.00		\$ 9,118
Asst. to Director	A	2	\$ 75.00		\$ 7,050
ISD Director	A	2	\$ 114.00		\$ 10,716
Asst. to Mayor	A	2	\$ 57.00		\$ 5,358
Mayor	A	2	\$ 84.00		\$ 7,896
Vendor Assistance	QC	10	\$ 35.00		\$ 16,450
Clerk of Board	A	1	\$ 38.00		\$ 1,786
Client Department	U	1	\$ 38.00		\$ 1,786
	Phase 2 Sub-total:	155			\$ 306,957

Appendix-Hidden Costs 3 of 3

5. Establish non-competitive contract for continuity while new ITB is awarded over \$100K.

Phase 1 = Threshold Determination Phase 2 = Negotiations and Award

Personnel Involved	Initiator (I)/ Approver (A)/Quality Control (QC)/ End User (U)	Estimated # of Hours to complete Task	Avg. Hourly Rate Per Position	Frequency of occurrence over Fiscal Year	Total Cost
Client Department	I	40	\$ 55.00	20	\$ 44,000
PCO	I	30	\$ 35.00		\$ 21,000
Vendor	I / A	1	\$ -		\$ -
PM Manager	A	5	\$ 59.00		\$ 5,900
PM Division Director	A	3	\$ 74.00		\$ 4,440
Vendor Assistance	QC	1	\$ 35.00		\$ 700
Phase 1 Sub-total:		80			\$ 76,040
Client Department	I/A	40	\$ 55.00	20	\$ 44,000
PCO	I/A	60	\$ 35.00		\$ 42,000
Vendor	A	40	\$ -		\$ -
Small Business Review	A	2	\$ 38.00		\$ 1,520
PM Manager	A	18	\$ 59.00		\$ 21,240
County Attorney	A	6	\$ 135.00		\$ 16,200
PM Division Director	A	4	\$ 74.00		\$ 5,920
ISD Assistant Director	A	4	\$ 97.00		\$ 7,760
Asst. to Director	A	4	\$ 75.00		\$ 6,000
ISD Director	A	2	\$ 114.00		\$ 4,560
Asst. to Mayor	A	2	\$ 57.00		\$ 2,280
Mayor	A	2	\$ 84.00		\$ 3,360
Vendor Assistance	QC	10	\$ 35.00		\$ 7,000
Clerk of Board	A	1	\$ 38.00		\$ 760
Agenda Coordinator	A	6	\$ 38.00		\$ 4,560
Asst. to Mayor	A	6	\$ 57.00		\$ 6,840
BCC Action	A	8	\$ 44.00		\$ 7,040
Vendor Assistance	QC	10	\$ 35.00		\$ 7,000
Client Department	U	1	\$ 38.00		\$ 760
Phase 2 Sub-total:		226			\$ 188,800