



## Six Sigma DMAIC Improvement Story

**Project Objective:**  
**To Reduce the Time to Process  
Homeownership Loan Applications**

*Last Updated: 4-26-2016*

### ***Team: Housing 305***

Amy Horton-Tavera   Bill Busutil   Mayra Morales   Christina Salinas Cotter   Leyani Sosa  
Gerald Farr   Shawn Topps   Lydia Glasgow   Tiffany Howard Jones   Divina Herrera  
Evelyn Brown

Michael Liu (Sponsor)

Jennifer Moon (Sponsor)



# Identify Project Charter

The team developed a team Project Charter.

Project Charter		
Business Case	<b>Project Name:</b>	Improve homeownership loan processing process
	<b>Problem/Impact:</b>	The homeownership loan processing process takes too long. Additionally, there are too many complaints from customers whose applications are denied (data regarding complaints is not presently available).
	<b>Expected Benefits:</b>	Reduced time to process loans; fewer complaints
Objectives	<b>Outcome Indicator(s)</b>	Q1- % of applications processed within 30 days; Q2 - # of complaints
	<b>Proposed Target(s)</b>	Target=95%
	<b>Time Frame:</b>	April through January 2016
	<b>Strategic Alignment:</b>	Supports the County's Business Plan
Scope	<b>In Scope:</b>	Homeownership loan process
	<b>Out-of-Scope:</b>	Rehab and new construction loan processes
	<b>Authorized by:</b>	Christina Salinas Cotter, Michael Liu
Team	<b>Sponsor:</b>	Michael Liu, Jennifer Moon
	<b>Team Leader:</b>	Amy Horton-Tavera
	<b>Team Members:</b>	Amy Horton-Tavera, Mayra Morales, Bill Busutil, Christina Salinas Cotter, Leyani Sosa, Gerald Farr, Shawn Topps, Lydia Glasgow, Tiffany Howard Jones, Divina Herrera, Evelyn Brown
	<b>Process Owner(s):</b>	Christina Salinas Cotter, Michael Liu
	<b>Mgmt Review Team:</b>	Christina Salinas Cotter, Michael Liu
Schedule	<b>Completion Date:</b>	29-Jan-16
	<b>Review Dates:</b>	Monthly and Final Review in March 2016
	<b>Key Milestone Dates:</b>	See Action Plan



# Develop Project Timeline Plan

The team developed a timeline plan to complete the Project.

WHAT: Complete DMAIC Story Project										
DMAIC Story Process Step	WHO	WHEN								
		2015								
		April	May	June	July	Aug	Sept	Oct	Nov	Dec
1. Define	Team	█								
2. Measure	Team		█							
3. Analyze	Team				█					
4. Improve	Team / PHCD								→	
5. Control	Team / PHCD									→



# Monitor Team Progress

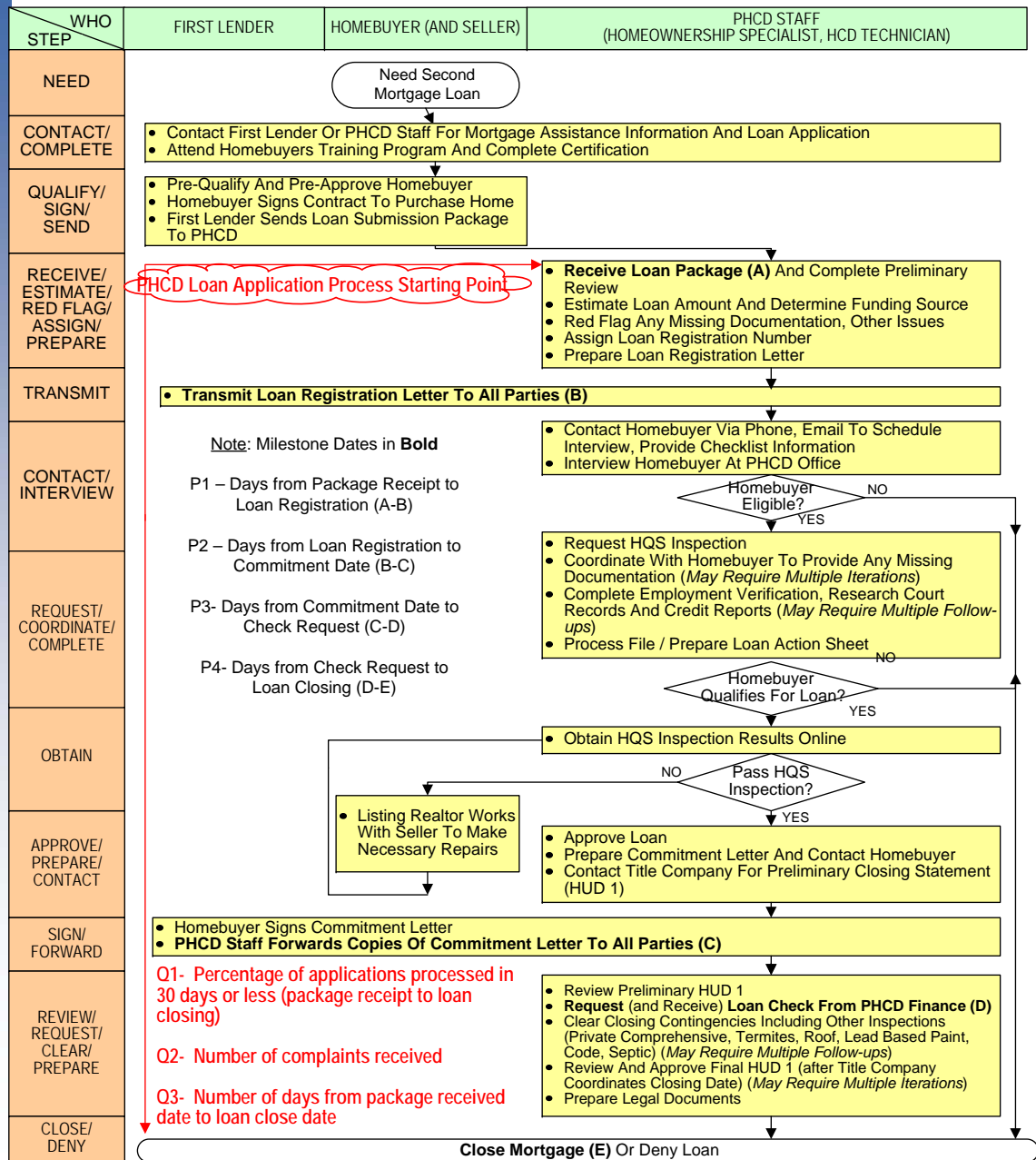
The Team and Management used a Checklist to monitor team progress.

DMAIC Story Checkpoints		
PLAN	Step 1 Define	<b>Objective: Demonstrate the importance of improvement needs in measurable terms.</b>
		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	<b>Objective: Investigate the features of the indicator, stratify the problem and set a target for improvement.</b>
		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	<b>Objective: Analyze the stratified data to identify and verify the root causes.</b>
		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	<b>Objective: Develop and implement countermeasures to eliminate the verified root causes of the problem.</b>
		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	<b>Objective: Confirm that the countermeasures taken impacted the root causes and the problem; and that the target has been met.</b>
		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	<b>Objective: Evaluate the team's effectiveness and plan future activities.</b>
		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. ✓
ACT	Step 5 Control	<b>Objective: Prevent the problem and its root causes from recurring. Maintain and share the gains.</b>
		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. ✓
	Step 5 Control	<b>Objective: Evaluate the team's effectiveness and plan future activities.</b>
		22. Responsibility was assigned and periodic checks scheduled to ensure compliance with the revised process or standard. ✓
		23. Specific areas for replication were identified. ✓
		24. Any remaining problems (or gaps) were addressed. ✓
Step 5 Control	<b>Objective: Evaluate the team's effectiveness and plan future activities.</b>	
	25. Lessons learned, P-D-C-A of the Story process, & team growth were assessed & documented. ✓	



# Review Process Flow Chart

Public Housing and Community Development (PHCD) – Homeownership Loan Application Process (Process Owner: Leyani Sosa)



The team constructed a flow chart describing the homeownership loan application process.

*Note: total PHCD "touch time" is typically in the range of approx. 2 days*

Next, the team considered how to capture indicator data.

# Identify Data Collection Needs

The team developed a data collection spreadsheet\* ...each row is a *Closed Loan*.

A: Package Received Date	B: Loan Registration Date	P1 - Days from Package Rcvd to Loan Registration (B-A)	Committed Date (C)	P2 - Days from Loan Registration to Committed Date (C-B)	Check Req Date (D)	P3 - Days from Committed Date to Check Request (D-C)	Close Date (E)	P4 - Days from Check Request to Close Date (E-D)	Q1 - Processed within 30 days?	Q2 - Days from Application Receipt to Closing (E-A)
		<b>Average:</b> 4		<b>Average:</b> 55		<b>Average:</b> 18		<b>Average:</b> 25	<b>Total %:</b> 4%	<b>Average:</b> 100
12/26/2012	12/27/2012	1	1/25/2013	29	01/30/13	5	02/25/13	6	no	61
3/31/2014	4/3/2014	3	6/6/2014	64	06/17/14	11	06/27/14	11	no	88
9/30/2014	10/1/2014	1	10/14/2014	13	10/16/14	2	11/03/14	18	no	34
5/30/2014	6/4/2014	5	10/1/2014	119	11/19/14	5	12/15/14	26	no	195
7/23/2012	7/27/2012	4	10/18/2012	83	11/06/12	19	12/05/12	29	no	135
5/31/2013	5/31/2013	0	6/19/2013	19	06/21/13	2	07/12/13	1	no	42
7/10/2013	7/10/2013	0	7/22/2013	12	08/05/13	14	09/26/13	52	no	78
7/2/2014	7/2/2014	0	8/27/2014	56	09/04/14	8	09/12/14	8	no	71
2/27/2013	3/1/2013	2	3/20/2013	19	03/26/13	6	05/07/13	2	no	69
11/8/2013	11/8/2013	0	5/9/2014	182	05/13/14	4	05/23/14	10	no	196
10/1/2013	10/1/2013	0	12/2/2013	62	12/05/13	3	12/23/13	18	no	83
2/4/2013	2/8/2013	4	3/5/2013	25	03/20/13	15	04/01/13	12	no	56
4/25/2014	4/28/2014	3	5/23/2014	25	06/20/14	28	06/30/14	11	no	66
10/26/2012	10/29/2012	3	12/20/2012	52	12/20/12	0	12/31/12	11	no	66
7/20/2012	7/23/2012	3	11/19/2012	119	11/30/12	11	01/03/13	34	no	167
10/27/2014	10/28/2014	1	11/25/2014	28	02/06/15	73	02/13/15	7	no	109
2/19/2014	2/20/2014	1	4/21/2014	60	04/03/14	-18	06/10/14	68	no	111
1/13/2014	1/14/2014	1	3/19/2014	64	04/02/14	14	04/17/14	5	no	94
2/13/2013	2/13/2013	0	2/23/2013	10	10/01/13	220	10/11/13	10	no	240
11/21/2012	12/4/2012	13	12/28/2012	24	01/23/13	26	07/18/13	176	no	239
3/11/2013	3/13/2013	2	6/10/2013	89	06/12/13	2	06/28/13	16	no	109
11/7/2013	11/18/2013	11	1/3/2014	46	01/15/14	12	01/31/14	16	no	85
5/3/2013	5/3/2013	0	5/21/2013	18	05/30/13	9	06/18/13	19	no	46

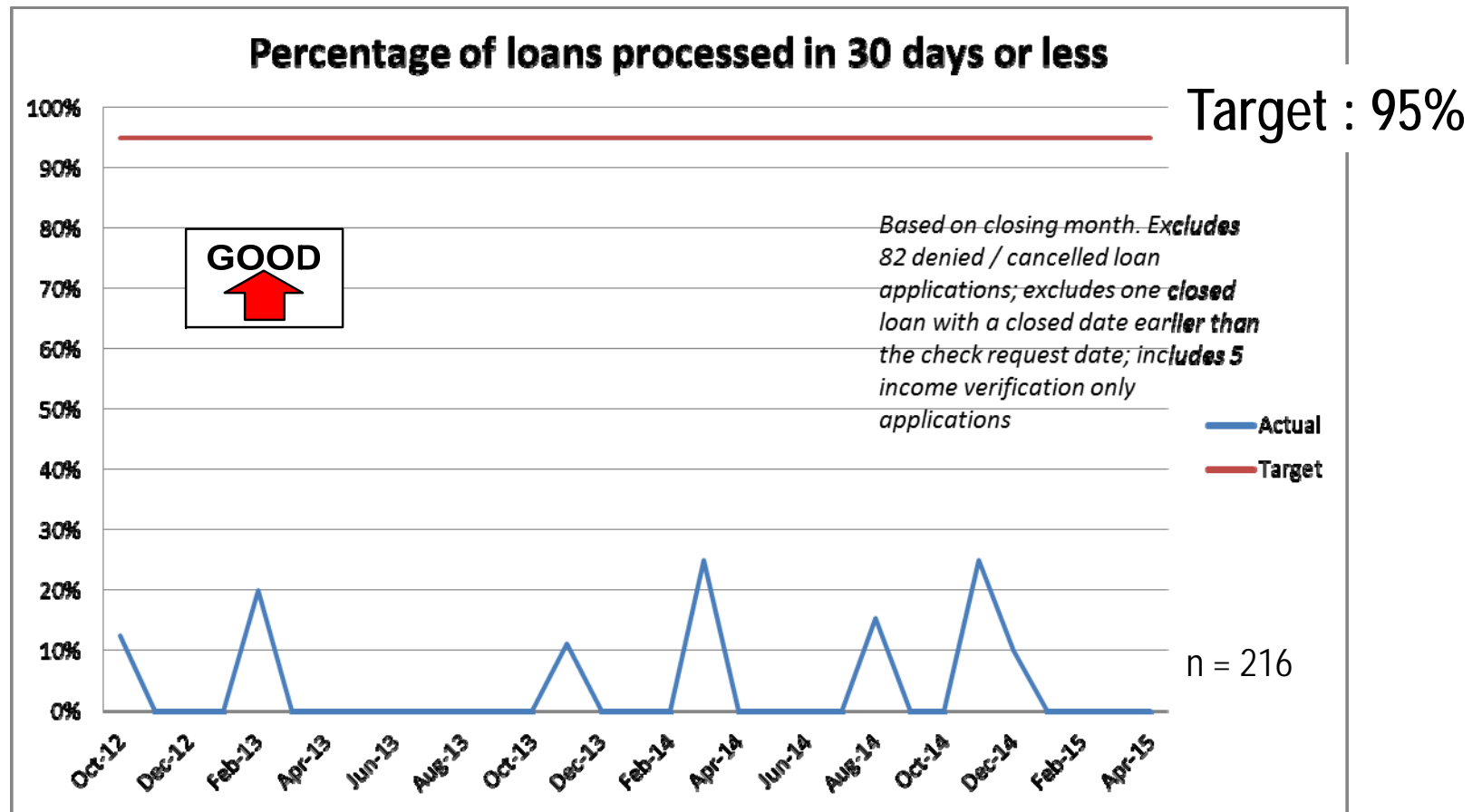
\*selected sample columns shown; other demographic data (e.g. loan amount, property location, etc.) was also available

Next, the team reviewed outcome indicator data.



# Review Selected Indicator

The team collected outcome indicator data from October 2012 to April 2015 and reviewed performance trends:

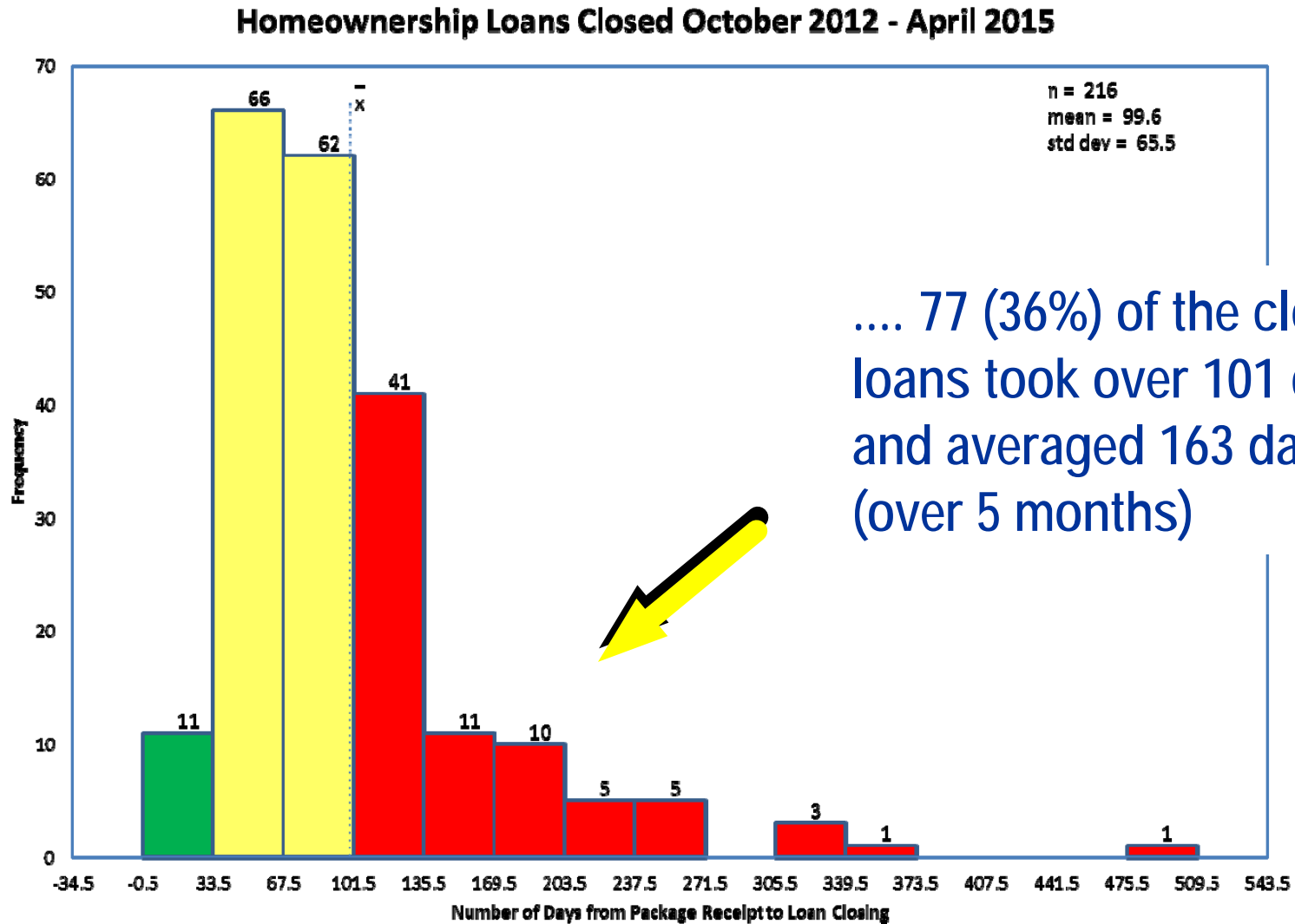


The team looked closer at closed homeownership loans from October 2012 to April 2015.



# Stratify the Problem

The team stratified the closed loans using a histogram and found...



The team looked closer at the 77 loans that were processed very late.





# Stratify the Problem

The team compared the **Very Late** to the **Timely / Slightly Late** Loans and found...

	Target	7 Timely Loans (under 34 days total processing time)	77 Timely and Slightly Late Loans (under 68 days)	77 Very Late Loans (over 101 days)	Difference	Process Step:
	3	2	3	4	1	Receive Package; Register Loan (P1)
	15	14	26	96	70	Interview Homebuyer; Verify Eligibility; Complete Underwriting, Coordinate Inspection; Approve Loan (P2)
	4	6	17	23	6	Review Preliminary HUD 1; Request Check (P3)
	7	9	14	39	25	Clear Closing Contingencies; Approve final HUD 1; Prepare Legal Documents; Close Loan (P4)
<b>Total:</b>	29	31	60	162	102	

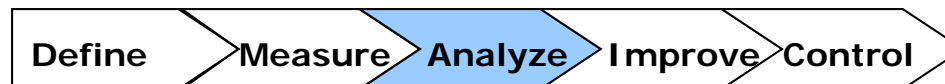
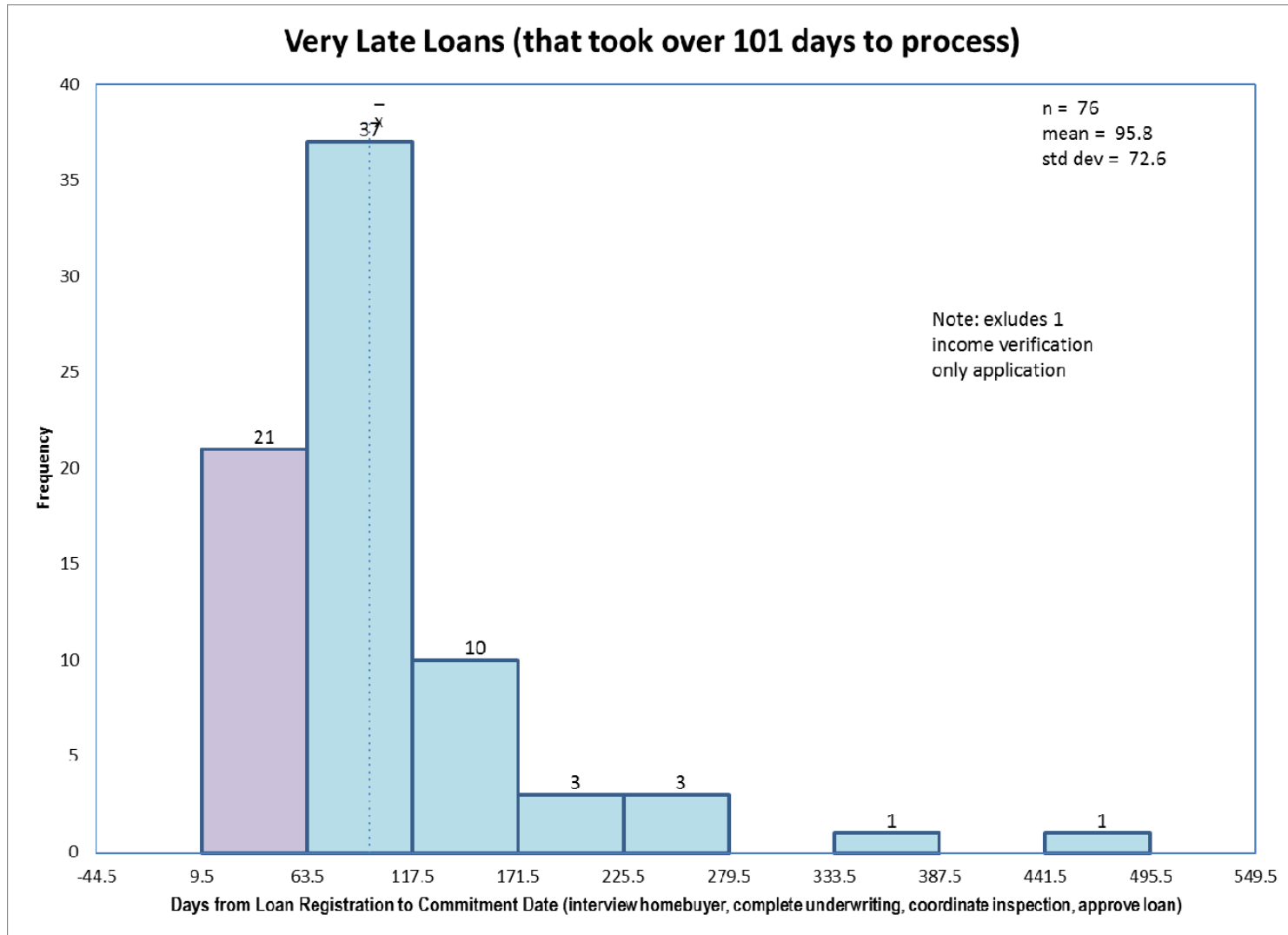
.... 77 Very Late Loans took 69 days longer in the underwriting & inspection phase, and 25 days longer in the closing phase, than Timely / Slightly Late Loans

The Team looked closer at these loans ...



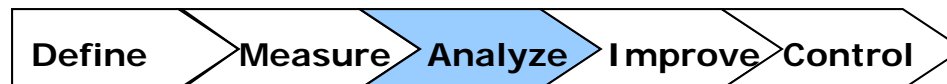
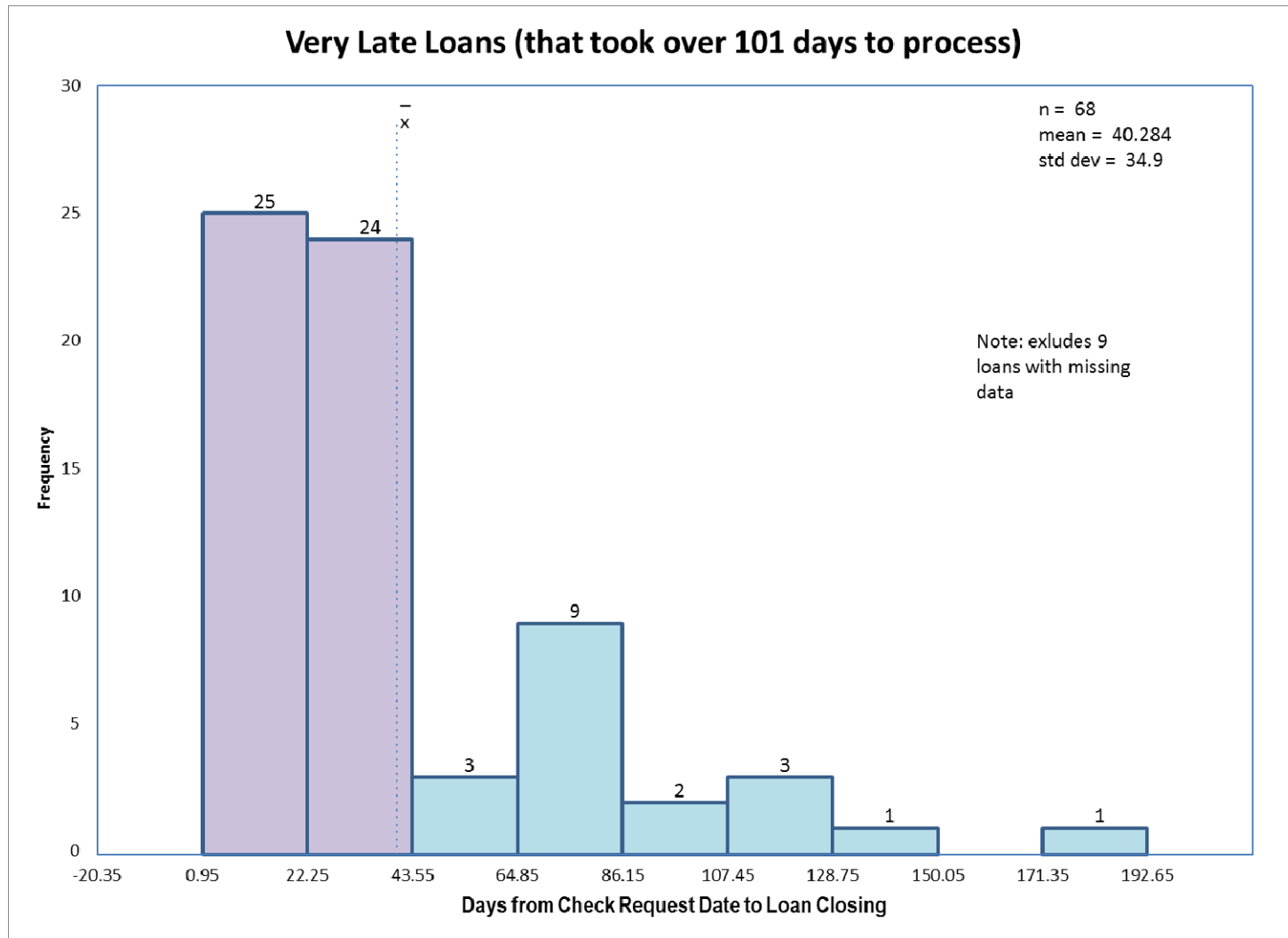
# Identify Potential Root Causes

The team further stratified the 77 very late loans and found...



# Identify Potential Root Causes

The team further stratified the 77 very late loans and found...



## Problem Statement:

*“Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date, **and** 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date”*

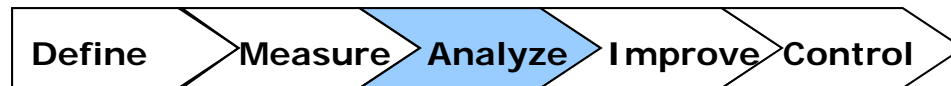


# Identify Potential Root Causes

The team reviewed a random sample of loan files and completed single case bore analysis.  
*(factors that applied to only one file are not shown)*

Problem Statement: *"Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date..."*

Reasons or Factors <i>(That possibly contributed to the loan being delayed)</i>	77 Very Late Loans															Total	percentage						
	38772	38745	38733	38652	38728	51879	38872	38679	38786	38866	51769	38906*	38594*	38787	38797			51772	51816	51762	38653	38728	
Missing or erroneous information provided by applicant	X	X	X	X	X		X	X	X			X	X	X			X	X		X	X	13	65%
Missing or erroneous documentation provided by first lender				X	X		X			X						X		X	X			7	35%
Appraisal was lower than initial purchase price	X																					1	100%
PHCD acted as first lender (Brownsville Tornado)												X	X									2	10%
Delay in obtaining C.O. (first lender submitted package prior to 80%)																X		X				2	10%
Delay in obtaining verification of employment from applicant's employer							X								X							2	10%
Applicant caused delays in scheduling interviews			X	X																		2	10%
Issue with appraisals (e.g. multiple appraisals)							X											X				2	10%



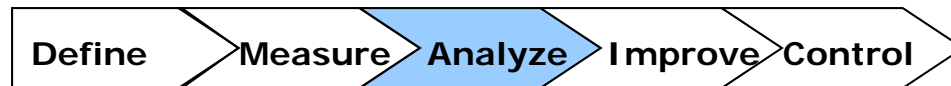
# Identify Potential Root Causes

The team reviewed a random sample of loan files and completed single case bore analysis.  
*(factors that applied to only one file are not shown)*

Problem Statement: *"...and 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date"*

Reasons or Factors <i>(That possibly contributed to the loan being delayed)</i>	77 Very Late Loans											Percentage
	387	51842	51	8814	38704	38688	378	3	29	1		
Home failed inspections	X	X	X	X	X	X	X		X	X	9	90%
First lender changed loan amount and/or interest rate (and PHCD had to ensure ratios were ok)	X		X		X	X	X				6	60%
Inspections or appraisals had to be re-worked because too much time had lapsed	X	X			X			X	X		5	50%
Delay in obtaining commitment letter from MDEAT, Florida Assist or City of Miami				X	X		X				3	30%
Discrepancy in number of rooms requiring rectification between seller and County			X			X						20%
Staff vacations during the holidays				X			X				2	20%
Delay in finalizing C.O. (Required by Miami Gardens)	X								X		2	20%

The team next looked to identify Potential Root Causes.



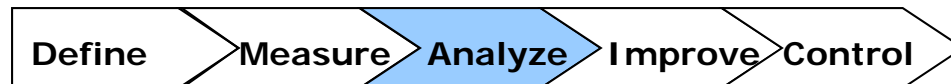
# Identify Potential Root Causes

The team completed Cause and Effect Analysis and found...

**Problem Statement: "Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date, and 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date"**

	Factors	Why?	Why?	Why?	Why?	Potential Root Cause(s)	
Registration to commitment letter	Missing or erroneous information provided by the first lender (35%)	First lender staff is unfamiliar with PHCD requirements (turnover, etc.)				A: PHCD does not educate first lender staff on its requirements	
		First lender staff has negative attitude toward PHCD requirements	First lender staff does not understand need for all of PHCD required documentation				
		Information is outdated by the time PHCD receives it	First lender's process is taking too long for PHCD requirements	First lender staff is unfamiliar with PHCD requirements			B: PHCD does not have a policy of providing consequences / incentives for first lender performance
				No consequences / incentives for first lender performance			
		No consequences / incentives for first lender performance					
	Missing or erroneous information provided by the applicant (65%)	Applicant is given incorrect information re: PHCD requirements by first lender	First lender staff is unfamiliar with PHCD requirements			A: PHCD does not educate first lender staff on its requirements	
			No consequences / incentives for first lender performance			B: PHCD does not have a policy of providing consequences / incentives for first lender performance	
		Applicant does not understand PHCD requirements	Homebuyer Counseling class provides incorrect / inadequate information re: PHCD requirements (and/or steers applicant to brokers)				C: PHCD does not monitor homebuyer counseling classes
							D: PHCD does not provide easy to understand information / promotional material to applicants
		It is difficult for applicant to gather all documents					E: PHCD documentation requirements are extensive

*\*Items in pink + added by OMB following team work session.*



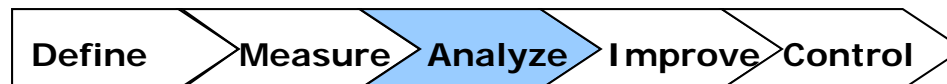
# Identify Potential Root Causes

The team completed Cause and Effect Analysis and found...

	Factors	Why?	Why?	Why?	Why?	Potential Root Cause(s)	
Check request to closing	Home failed inspections (90%)	Seller does not prepare home for inspection	No consequences for seller / realtor for failed inspections			F: PHCD has no authority to impose consequences for failed inspections	
		Seller is unaware of all inspection requirements and/or consequences of failed inspections				G: PHCD does not proactively inform sellers / realtors of inspection requirements or consequences of failed inspections	
	First lender changed loan amount or interest rate (and PHCD had to ensure ratios were OK) (60%)	Interest rates are not locked in by the first lender (and other process delays increase the likelihood of changes)	Buyer is not aware they can pay a fee to lock in rate	Homebuyer counseling may not provide this information to applicant			C: PHCD does not monitor homebuyer counseling classes
							H: No requirement for first lender to lock in rates
		Buyer cannot pay fee to lock in interest rate				I: Miami-Dade County does not assist buyer in paying fee to lock in interest rate	
		Insurance costs may come in higher than anticipated (but this cannot usually be avoided because they are dependent on appraisal and lot survey)					
	Delay in obtaining commitment letter from MDEAT, Florida Assist or City of Miami (30%)						J: MDEAT begins its process after PHCD issues its commitment
Other lenders are coordinated by first lender; PHCD does not know reasons for delay						???	
Inspections or appraisals had to be re-worked because too much time had lapsed (50%)	Process delays cause inspection to expire (inspections expire in 30 days)					K: PHCD standard - inspection is only good for 30 days	
Other Factors not identified in SCB	Delay in getting HQS inspectors out to property					L: PHCD HQS inspectors are a shared resource and do not report to homeownership loan group	

*\*Items in pink + added by OMB following team work session.*

The team then looked to verify the potential root causes...



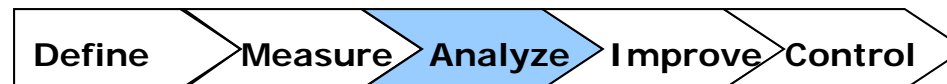


# Verify Root Causes

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

Root Cause Verification Matrix		
Potential Root Cause	How Verified?	Root Cause?
<b>A</b> PHCD does not educate first lender staff on its requirements	The Team included staff with knowledge of its internal processes and verified that PHCD does not educate first lender staff	Root Cause
<b>B</b> PHCD does not have a policy of providing consequences / incentives for first lender performance	The Team included staff with knowledge of its internal processes and verified that PHCD does not provide consequences / incentives	Root Cause
<b>C</b> PHCD does not monitor homebuyer counseling classes	The Team included staff with knowledge of its internal processes and verified that PHCD does not monitor classes	Root Cause
<b>D</b> PHCD does not provide easy to understand information / promotional material to applicants	The Team included staff with knowledge of its internal processes and verified that PHCD does not provide promotional materials	Root Cause
<b>E</b> PHCD documentation requirements are extensive	The Team conducted a thorough review of all documentation requirements and determined that most are required by federal and/or state rules, while some are at PHCD's discretion (see appendix)	Root Cause
<b>F</b> PHCD has no authority to impose consequences for failed inspections	The Team included staff with knowledge of its internal processes and governing legislation and verified that PHCD does not have the authority to impose consequences	Root Cause
<b>G</b> PHCD does not proactively inform sellers / realtors of inspection requirements or consequences of failed inspections	The Team included staff with knowledge of its internal processes and verified that PHCD does not inform sellers / realtors of inspection requirements	Root Cause
<b>H</b> No requirement for first lender to lock in rates	The Team included staff with knowledge of the lending industry and verified that there is no such requirement	Root Cause
<b>I</b> Miami-Dade County does not assist buyer in paying fee to lock in interest rate	The Team included staff with knowledge of its internal processes and verified that PHCD does not provide this assistance	Root Cause
<b>J</b> MDEAT begins its process after PHCD issues its commitment	The Team included staff with knowledge of its internal processes and verified that MDEAT begins its process after PHCD issues its commitment	Root Cause
<b>J-2</b> Delay in obtaining commitment from other lenders (excluding MDEAT) (root cause unknown)	N/A - potential root cause not identified	Maybe
<b>K</b> PHCD standard - inspection is only good for 30 days	The Team included staff with knowledge of its internal processes and verified that this is a PHCD standard (i.e. it is not otherwise required)	Root Cause
<b>L</b> PHCD HQS inspectors are a shared resource and do not report to homeownership loan group	The data reviewed by the team did not show that shared inspectors are the cause of significant delays	No

...most were validated as root causes.



# Identify and Select Countermeasures (1 of 4)

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

**Problem Statement**

“Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date, and 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date”

Verified Root Causes		Countermeasures	Legend: 3=Moderately 5 = Extremely; 3 = Average; 1 = Poor			
			Ratings			
			Effectiveness	Feasibility	Overall	Take Action? Yes/No
A	PHCD does not educate first lender staff on its requirements	A1: Provide lender training & certification twice a year	4.5	5	22.5	Y
		A2: Develop a procedure to notify lenders immediately (e.g. e-mail blast) upon changes to PHCD rules	4	5	20.0	Y
		A3: Review and update checklist on a regular basis to ensure all required documents are included	2	5	10.0	Y
B	PHCD does not have a policy of providing consequences / incentives for first lender performance	B1: Implement a system to remove poor performing lenders (such as MDEAT Sanction Program), and add new lenders as needed to ensure adequate supply	5	5	25.0	Y
C	PHCD does not monitor homebuyer counseling classes	C1: Develop a procedure (to include updating RFA & contracts as needed) for oversight of homebuyer counseling classes, to include training counselors on PHCD requirements, monitoring classes, and terminating poor performing contractors.	5	4	20.0	Y
		C2: Increase role of project manager in overseeing homebuyer counseling classes to ensure borrowers are educated on PHCD requirements	5	4	20.0	Y



# Identify and Select Countermeasures (2 of 4)

**Problem Statement**

“Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date, and 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date”

Verified Root Causes		Countermeasures	Ratings			
			Effectiveness	Feasibility	Overall	Take Action? Yes/No
<b>D</b>	PHCD does not provide easy to understand information / promotional material to applicants	<b>D1: Require buyers to go to counseling before meeting with the first lender (and work with lending partners to implement this policy)</b>	2	5	10.0	Y
		<b>D2: Update website (and other promotional materials?) with simple, easy to understand information for potential applicants regarding loan program rules and process; update should include customer input (see also L4)</b>	4	2	8.0	Y
		<b>D3: (First lenders to) Develop a better process to screen applicants to determine eligibility before they apply</b>	3	1	3.0	N
<b>E</b>	PHCD documentation requirements are extensive	<b>E1: Update PHCD requirements based on HOME/SHIP Guidelines (e.g. Verification of Employment no longer required - but will need official pay stubs) (assumes funder requirements are accurate)</b>	3	5	15.0	Y
		<b>E2: Periodically review local decisions that affect the guidelines that may not be required</b>	2	5	10.0	Y
<b>F</b>	PHCD has no authority to impose consequences for failed inspections	<b>F1: Evaluate alternatives for holding realtors accountable for multiple failed inspections</b>	1	1	1.0	N

Legend: 3=Moderately  
5 = Extremely; 3 = Average; 1 = Poor



# Identify and Select Countermeasures (3 of 4)

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

**Problem Statement**

“Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date, and 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date”

Verified Root Causes		Countermeasures	Legend: 3=Moderately 5 = Extremely; 3 = Average; 1 = Poor			
			Ratings			
			Effectiveness	Feasibility	Overall	Take Action? Yes/No
<b>G</b>	PHCD does not proactively inform sellers / realtors of inspection requirements or consequences of failed inspections	<b>G1: Provide training and/or materials for realtors on PHCD inspection requirements (and consider training lenders and realtors together)</b>	4	5	20.0	Y
		<b>G2: Provide HQS inspection template to First Lenders (see also countermeasures under item A)</b>	5	5	25.0	Y
		<b>G3: Ensure that specific HQS inspection information is included in Homebuyer counseling sessions (see also countermeasures under item C)</b>	5	5	25.0	Y
<b>H</b>	No requirement for first lender to lock in rates	<b>H1: Remind First Lenders to immediately inform PHCD of rate changes (see also countermeasures under item A)</b>	4	5	20.0	Y
<b>I</b>	Miami-Dade County does not assist buyer in paying fee to lock in interest rate	<b>I1: Revise PHCD guidelines to require that First Lenders do not charge a fee for re-locks or extensions</b>	2	5	10.0	Y
<b>J</b>	MDEAT begins its process after PHCD issues its commitment	<b>J1: This is no longer an issue; MDEAT has changed its procedures</b>	n/a	n/a	n/a	n/a
<b>J-2</b>	Delay in obtaining commitment from other lenders (excluding MDEAT) (root cause unknown)	<b>J-2.1 Implement new federal regulations requiring that all commitments must be provided at least 10 days before closing</b>	3	5	15	Y



# Identify and Select Countermeasures (4 of 4)

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

**Problem Statement**

“Fifty-five Very Late Approved Loans took longer than 63 days to process between the loan registration date and the check request date, and 19 Very Late Approved Loans took longer than 43 days to process between the check request date and the closing date”

Verified Root Causes		Countermeasures	Legend: 5 = Extremely 3 = Average 1 = Poor			
			Ratings			
			Effectiveness	Feasibility	Overall	Action? Yes/No
K	PHCD standard - inspection is only good for 30 days	K1: Extend the validity of HQS inspections from 30 to 60 days (implement 3 month pilot and track frequency of problems)	4.5	5	22.5	Y
		K2: Work with private inspectors to extend the validity of Roof and Termite inspections from 30 to 45 days	4	1	4	N
L - Additional Proposed Countermeasures:		L1: Monitor the date a "complete" file is received from the first lender (not just the initial receipt date, since sometimes files are received incomplete)				N (sometimes missing docs are treated as closing contingencies)
		L2: Track the date the initial loan application is received by the first lender (or TIL date) (since, from the customer perspective, total loan processing time is most important), and the frequency of incomplete applications from each lending partners				Y
		L3: Place all relevant performance indicators on PHCD scorecard and ensure data is regularly updated (added by OMB)				Y
		L4: Develop a strategy for obtaining customer input into the loan process (options include surveys, focus groups, complaint tracking system and/or other feedback mechanisms) and making improvements based on customer needs (added by OMB) (see also D2)				Y



# Identify Barriers and Aids

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

Countermeasure(s): Implement 14 Countermeasures to Improve Timeliness of Homeownership Loan Processing	
Barriers	Aids
Forces against Implementation	Forces For Implementation
1) Limited resources (funding and staff time) <i>(Supported by Aids: B, C, D)</i>	A) PHCD is currently exploring technology upgrades
2) Lending / program partners may push back on changes <i>(Supported by Aids: B, C, D, E)</i>	B) Staff is very knowledgeable and has experience with several of the proposed countermeasures
3) Data is currently tracked manually <i>(Supported by Aid: A)</i>	C) Beneficial impact on loan processing time
	D) PHCD executive team very supportive of team's efforts in expediting the process
	E) Participants at project work session (e.g. banks, FL Housing, MDEAT) were supportive of changes

The team next developed an action plan...



# Develop an Action Plan (1 of 3)

The team identified the responsible people and implementation dates for the recommended countermeasures...

Verified Root Causes		Countermeasures	Take Action? Yes/No	Responsible Person	Proposed Implementation Date
A	PHCD does not educate first lender staff on its requirements	<b>A1: Provide lender training &amp; certification twice a year</b>	Y	Glasgow	3/31/2016
		<b>A2: Develop a procedure to notify lenders immediately (e.g. e-mail blast) upon changes to PHCD rules</b>	Y	Topps	asap
		<b>A3: Review and update checklist on a regular basis to ensure all required documents are included</b>	Y	Topps	asap
B	PHCD does not have a policy of providing consequences / incentives for first lender performance	<b>B1: Implement a system to remove poor performing lenders (such as MDEAT Sanction Program), and add new lenders as needed to ensure adequate supply</b>	Y	Topps	4/16/2016
C	PHCD does not monitor homebuyer counseling classes	<b>C1: Develop a procedure (to include updating RFA &amp; contracts as needed) for oversight of homebuyer counseling classes, to include training counselors on PHCD requirements, monitoring and attending classes, and terminating poor performing contractors.</b>	Y	Glasgow, Topps	2/6/2016
		<b>C2: Increase role of project manager in overseeing homebuyer counseling classes to ensure borrowers are educated on PHCD requirements</b>	Y	Glasgow, Topps	2/6/2016
D	PHCD does not provide easy to understand information / promotional material to applicants	<b>D1: Require buyers to go to counseling before meeting with the first lender (and work with lending partners to implement this policy, to include revising guidelines and including information in email blast)</b>	Y	Glasgow	1/20/2016
		<b>D2: Update website (and other promotional materials?) with simple, easy to understand information for potential applicants regarding loan program rules and process; update should include customer input (see also L4)</b>	Y	Topps, Brown, Herrera	2/6/2016



# Develop an Action Plan (2 of 3)

Verified Root Causes		Countermeasures	Take Action? Yes/No	Responsible Person	Proposed Implementation Date
E	PHCD documentation requirements are extensive	<b>E1: Update PHCD requirements based on HOME/ SHIP Guidelines (e.g. Verification of Employment no longer required - but will need official pay stubs) (assumes funder requirements are accurate)</b>	Y	Glasgow, Topps	3/1/2016
		<b>E2: Periodically review local decisions that affect the guidelines that may not be required</b>	Y	Glasgow	3/1/2016
G	PHCD does not proactively inform sellers / realtors of inspection requirements or consequences of failed inspections	<b>G1: Provide training and/or materials for realtors on PHCD inspection requirements (and consider training lenders and realtors together)</b>	Y	Herrera, Brown	3/15/2016
		<b>G2: Provide HQS inspection template to First Lenders (see also countermeasures under item A)</b>	Y	Glasgow	3/15/2016
		<b>G3: Ensure that specific HQS inspection information is included in Homebuyer counseling sessions (see also countermeasures under item C)</b>	Y	Topps	3/15/2016
H	No requirement for first lender to lock in rates	<b>H1: Remind First Lenders to immediately inform PHCD of rate changes (to be included in email blast - item A2)</b>	Y	Glasgow	2/6/2016
I	Miami-Dade County does not assist buyer in paying fee to lock in interest rate	<b>I1: Revise PHCD guidelines to require that First Lenders do not charge a fee for re-locks or extensions</b>	Y	Glasgow / Topps	2/6/2016





# Develop an Action Plan (3 of 3)

Verified Root Causes		Countermeasures	Take Action? Yes/No	Responsible Person	Proposed Implementation Date
<b>J-2</b>	Delay in obtaining commitment from other lenders (excluding MDEAT) (root cause unknown)	<b>J-2.1 Implement new federal regulations (to include revising guidelines) requiring that all commitments must be provided at least 10 days before closing</b>	Y	Glasgow / Topps	3/15/2016
<b>K</b>	PHCD standard - inspection is only good for 30 days	<b>K1: Extend the validity of HQS inspections from 30 to 60 days (implement 3 month pilot and track frequency of problems)</b>	Y	Glasgow, Topps	2/6/2016
<b>L - Additional Proposed Countermeasures:</b>		<b>L2: Track the date the initial loan application is received by the first lender (or TIL date) (since, from the customer perspective, total loan processing time is most important), and the frequency of incomplete loan packages from each lending partner</b>	Y	Glasgow, Jones	1/15/2016
		<b>L3: Place all relevant performance indicators on PHCD scorecard and ensure data is regularly updated (added by OMB)</b>	Y	Sosa, Cotter	3/15/2016
		<b>L4: Develop a strategy for obtaining customer input into the loan process (options include surveys, focus groups, complaint tracking system and/or other feedback mechanisms) and making improvements based on customer needs (added by OMB) (see also D2)</b>	Y	Topps, Glasgow	4/16/2016

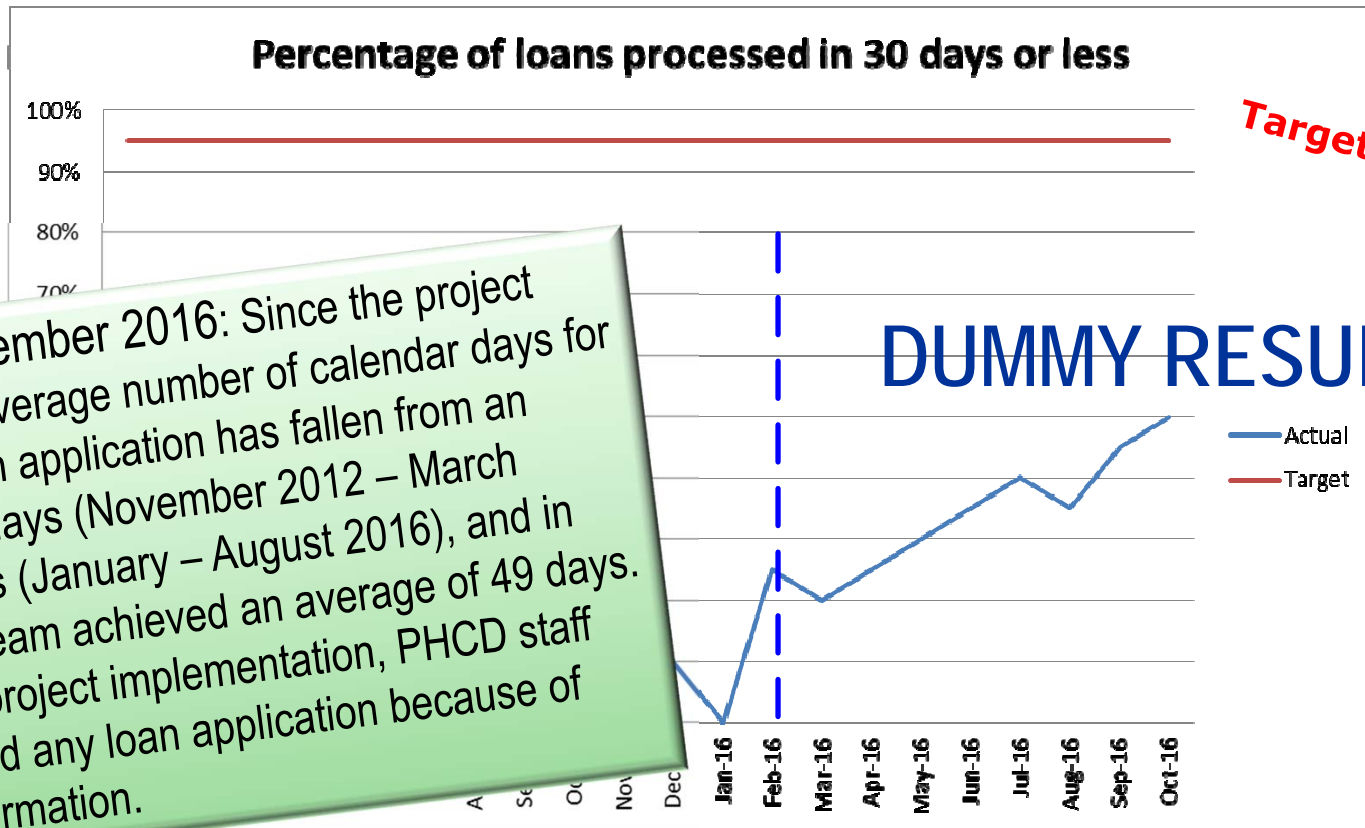


# Review Selected Indicator

The team collected indicator data and reviewed results.

Q1: Percentage of loans processed in 30 days or less (package receipt to loan closing)

Countermeasures implemented in February 2016



**UPDATE - September 2016:** Since the project completion, the average number of calendar days for processing a loan application has fallen from an average of 100 days (November 2012 – March 2015) to 77 days (January – August 2016), and in April 2016 the team achieved an average of 49 days. Of note, since project implementation, PHCD staff has not returned any loan application because of insufficient information.

**DUMMY RESULTS**

The team will continue to monitor the countermeasures and results.



# Standardize Countermeasures

The team Developed a Process Control System (PCS) to monitor the process on-going.

Process Control System						
<b>Process Name:</b> PHCD Homeownership Loan Application Process			<b>Process Owner:</b> Leyani Sosa			
<b>Process Customer:</b> Homebuyers / loan applicants			<b>Critical Customer Requirements:</b> Timely processing; appropriate application disposition; affordable loan; home meeting quality standards			
<b>Process Purpose:</b> Support homeownership for low and moderate income households			<b>Outcome Indicators:</b> Q1, Q2, Q3			
Indicators		Checking / Indicator Monitoring			<ul style="list-style-type: none"> <li>• Comments</li> <li>• Actions Required for Exceptions</li> <li>• Procedure References</li> </ul>	
Process Indicators	Control Limits	Data to Collect	Timeframe (Frequency)	Responsibility		
Quality Indicators	Specs/ Targets	What is Checking Item or Indicator Calculation	When to Collect Data?	Who will Collect Data?		
P1	Days from Package Received to Loan Registration	3	(date loan registered) - (date package received)	By Event	Tiffany Howard-Jones	<ul style="list-style-type: none"> <li>• Note that some packages are received incomplete</li> </ul>
P2	Days from Loan Registration to Committed Date	15	(commitment date) - (date loan registered)	By Event	Evelyn Brown & Divina Herrera	<ul style="list-style-type: none"> <li>•</li> </ul>
P3	Days from Committed Date to Check Request	4	(date check requested) – (commitment date)	By Event	Tiffany Howard-Jones	<ul style="list-style-type: none"> <li>•</li> </ul>
P4	Days from Check Request to Closing	7	(closing date) – (date check requested)	By Event	Evelyn Brown & Divina Herrera	<ul style="list-style-type: none"> <li>•</li> </ul>
Q1	% of applications processed in 30 days or less	95	(# loans processed within 30 dates) / (total # loans closed)	By Event	Shawn Topps & Lydia Glasgow	<ul style="list-style-type: none"> <li>•</li> </ul>
Q2	# of complaints received	TBD	# complaints received	Monthly	Shawn Topps & Lydia Glasgow	<ul style="list-style-type: none"> <li>• Consider specific types of complaints (e.g. process took too long; problem with home after closing, etc.)</li> </ul>
Q3	# of Days from package received date to loan close date	30	(closing date) – (date package received)	By Event	Tiffany Howard-Jones	<ul style="list-style-type: none"> <li>• Note that some packages are received incomplete</li> <li>• Also consider days with first lender</li> </ul>

Approved: \_\_\_\_\_ Date: \_\_\_\_\_ Rev #: \_\_\_\_\_ Rev Date: \_\_\_\_\_



# Identify Lessons Learned

## Lessons Learned:

- ❖ Including lending partners and other stakeholders in the project was helpful in generating countermeasures and enhancing relationships
- ❖ Team members learned to “agree to disagree” on certain issues; the opportunity to exchange ideas among everyone was valuable
- ❖ It is important to enhance training / education of all stakeholders
- ❖ Data analysis led to root causes that were not initially apparent

## Next Steps

- 1) Continue to monitor the countermeasures and performance results.



Questions?