Comprehensive Credit Risk Management at Credit Unions

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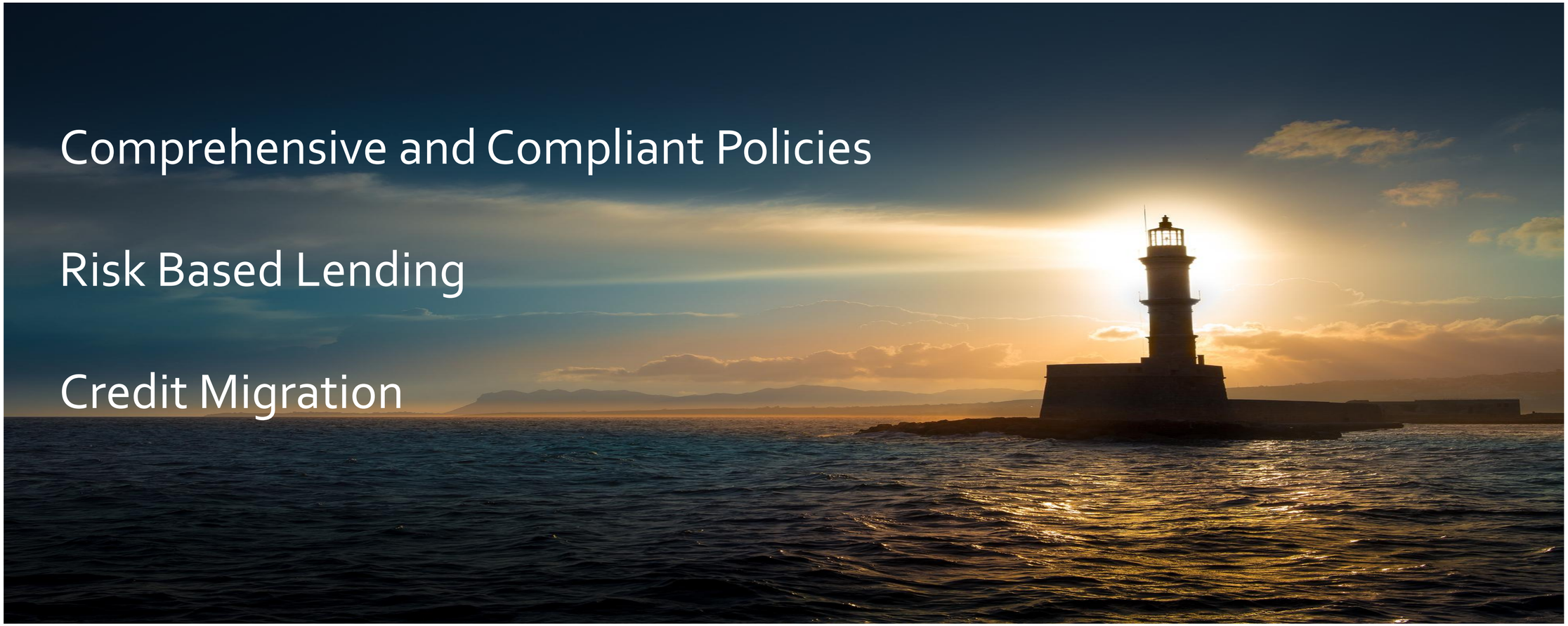
Key Elements/Tools



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Credit Risk Management

Credit risk policies describe the amount of risk the credit union will tolerate in its portfolio as well as how the credit union will identify credit problems early and respond to those problems.

Credit Risk Management policies should also describe the tools the credit union will use to manage credit risk and describe how those tools will aid in carrying out policy.

Credit Risk Management policy should support other loan policies including Loan Concentration Risk, IRR and Liquidity Policies.

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Creating Compliant and Useful Policy

Making sure policies provide guidance to management and reflect the credit union's risk-management philosophy.

Loan policies have become much more detailed and encompassing as a result of regulations and the growing complexity in loan portfolios.

Loan Process Management

Loan process policies describe:

- the credit union's overall lending philosophy, instructions for loan officers, and so forth.
- Many credit unions have individual loan policies for business loans, consumer loans, collection practices, mortgage loans, etc.
- Loan process-type policies have grown much more descriptive and complex as a result of regulatory requirements.

What is Risk Based Lending?

Risk Based Lending consists of:

Underwriting (Do you want to make this loan?)

Pricing (What rate must I charge to account for the risk?)

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Underwriting

Credit Unions create criteria for making loan decisions

Identify criteria that affect risk

Criteria must be valid, reliable and fair

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Underwriting

Validity- are you measuring what you intend to measure

Reliable- do you get the same results from repeated applications

Fair- do all similar people get the same outcomes

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Risk Based Lending - Guidance

- NCUA Guidance Letter - 174
- "Risk-based lending allows credit union management to assess the risks involved in different **types of loan products and price** these products based upon the **inherent risk** associated with individual borrowers.
- The end result is a **more diversified loan portfolio** mixing lower-yielding, lower risk loans with higher-yielding, but riskier loans."
- "Prior to beginning a risk-based lending program, it is important that the credit union board **determine the parameters** for the riskier loans based on the credit union's financial condition, business plan, lending and collection history, and asset liability management (ALM) program."

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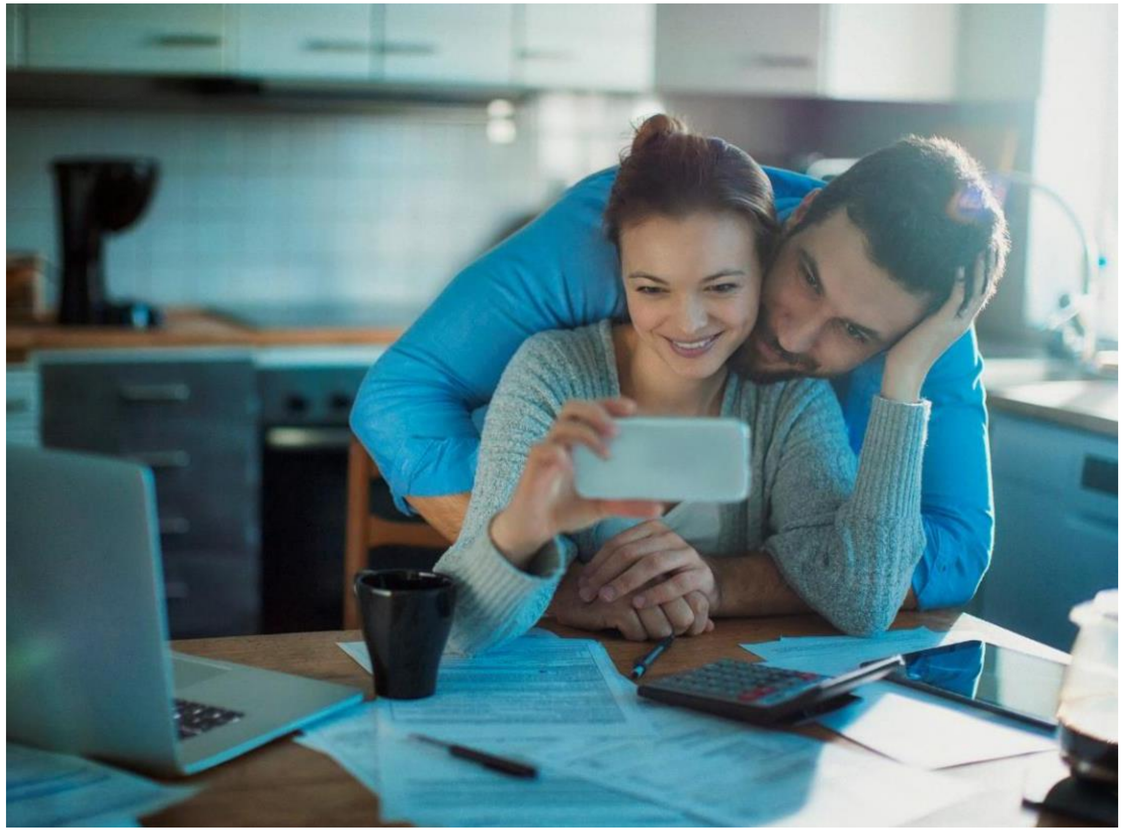
Underwriting



Purpose of Risk Based Lending

- Diversify loan portfolio
- Extend loans to underserved
- Make loans we would otherwise avoid

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Risk Based Lending - Definition

- NCUA Guidance Letter - 174

- "Prior to beginning a risk-based lending program, it is important that the credit union board **determine the parameters** for the riskier loans based on the credit union's financial condition, business plan, lending and collection history, and asset liability management (ALM) program."

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Underwriting

Profile Criteria		Profile A (A & A+)
Employment		1 Year
Max D/I		45
Unsecured D/I		35
Delinquency		
30+ current Del. On Home or Car		None
60+ current Del. In past		24 mths/None
Max Times Del. In Pst Year		None
Open Coll. Accts in 24 mths		Rate Bump
Products		
Secured Loans		
Min/Max Amt		$2,500.00 - $100,000.00
Max Mileage		120,000
Max Term		96
LTV		120 / 150 Gap
Signature Loans		
Min/Max Amt		A=$500.00 - $15,000.00
		A+=$500.00 - $25,000.00

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Underwriting

Profile Criteria		Profile A (A & A+)		Profile B (B & C)		Profile C (D & E)
Employment		1 Year		6 Months		60 Days
Max D/I		45		45		45
Unsecured D/I		35		25		20
Delinquency						
30+ current Del. On Home or Car		None		None		None
60+ current Del. In past		24 mths/None		12 mths/None		6 mths/None
Max Times Del. In Pst Year		None		3 or 4		6
Open Coll. Accts in 24 mths		Rate Bump		Rate Bump		Rate Bump
Products						
Secured Loans						
Min/Max Amt		$2,500.00 - $100,000.00		$2,500.00 - $50,000.00		$2,500.00 - $20,000.00
Max Mileage		120,000		100,000		100,000
Max Term		96		72 Month		60 Months
LTV		120 / 150 Gap		100		90
Signature Loans						
Min/Max Amt		A=$500.00 - $15,000.00		C=$500.00 - $5,000.00		E=$500.00 - $1,000.00
		A+=$500.00 - $25,000.00		B=$500.00 - $7,500.00		D=$500.00 - $2,500.00

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Risk Based Lending - Considerations

- NCUA Guidance Letter - 174

Risk-based lending involves setting a **tiered pricing structure** that assigns loan rates based upon an **individual's credit risk**.

Through a carefully planned risk-based lending program, credit unions may be able to make loans to **somewhat higher-risk borrowers**, as well as better serve their **more credit-worthy members."**

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NCUA Guidance Letter - 174

"The key to successful risk-based lending is to ensure that ***prices (rates) correctly reflect the risk and costs involved.***"

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Risk Based Pricing

We define risk, in relation to the loan portfolio, as the likelihood that money that has been expended or extended by the credit union will not return.

- Money expended includes cost of funds, loan operations and collections.

- Money extended includes charge-offs of principle balances.

These items are identified as costs and as such can be statistically (stochastically) quantified and measured.

The consistent and complete measurement of these costs is foundational to an accurate and effective loan pricing system.

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Credit Migration

Many names for the same concept

- Credit Migration
- Multi-dimensional portfolio management
- On-going decisioning
- Migration Analysis

Credit Migration

- No matter what name you use it is an important tool for managing the risk in your loan portfolio;

- Loan losses are directly tied to it;

- Examiners are asking for, and in cases, requiring it; and

- It provides a valid and understandable method to identify expected credit losses

Credit Migration

Vital Statistic

- 60% to 80% of all losses come from loans that were made in higher grades and then experienced a falling FICO score.

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Utilize Credit Migration

- Identify in policy what you will monitor and how
- Set up specific procedures to comply with policy
- Document your action
- Report to Board

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Understanding Credit Scores

Credit Agencies continually monitor multiple risk indicators to calculate credit scores:

- Payment history
- Amount of credit
- Available credit
- Employment history
- Repossessions
- Bankruptcies
- Foreclosures

Using these variables they employ regression based models to predict loan losses

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Understanding Credit Scores

Each of these variables is dynamic

- Changes in variables may affect credit
- Credit changes affect risk
- Changes in risk may affect member performance

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Credit Migration

Understanding your Loan Portfolio

- **Credit risk can Increase or Decrease**
- **Which risk pools are improving impairing?**

Identifying Potential Problems

- Isolate impaired loans and react to them early
- Understand the risk in your pools and adjust lending practices

Identifying Emerging Opportunities

- Recognize Members that are making smart decisions
- Proactively offer ways to help your members
- Understand which pools of loans to take on more risk

Applying Precision in Allowance Calculation

- Statistically based calculation
- Complying to regulations

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Understanding Your Credit Portfolio

Sample Credit Union
Risk Change By Credit Score
For Period Ending 11/30/2012

Dollar		Original FICO Grades							
Current FICO		A+	A	B	C	D	E	Not Reported	Grand Total
A+	740+	$ 33,886,855	$ 4,911,282	$ 1,696,945	$ 425,522	$ 105,543	$ 63,014	$ 3,184,419	$ 44,273,580
A	690-739	$ 7,886,015	$ 11,359,190	$ 5,212,544	$ 857,840	$ 146,917	$ 147,464	$ 1,828,060	$ 27,438,030
B	660-689	$ 1,857,191	$ 4,601,064	$ 10,527,101	$ 2,055,535	$ 1,333,417	$ 158,714	$ 537,630	$ 21,070,652
C	630-659	$ 910,286	$ 910,852	$ 2,541,847	$ 2,547,064	$ 886,367	$ 848,199	$ 268,658	$ 8,913,273
D	600-629	$ 17,970	$ 123,766	$ 1,503,642	$ 2,480,152	$ 715,706	$ 525,812	$ 526,391	$ 5,893,438
E	<600	$ 91,237	$ 610,842	$ 1,026,951	$ 2,088,359	$ 717,708	$ 643,272	$ 563,043	$ 5,741,413
Not Reported		$ 75,089	$ 29,047	$ 481,778	$ 189,437	$ -	$ 300	$ 472,982	$ 1,248,632
Grand Total		**$ 44,724,643**	**$ 22,546,043**	**$ 22,990,809**	**$ 10,643,908**	**$ 3,905,658**	**$ 2,386,776**	**$ 7,381,182**	**$ 114,579,017**
Loans Not Risk Rated and Adjustments									$ 29,805,954
Total in Portfolio									**$ 144,384,972**

Percent		Original FICO Grades							
Current FICO		A+	A	B	C	D	E	Not Reported	Grand Total
A+	740+	75.77%	21.78%	7.38%	4.00%	2.70%	2.64%	43.14%	38.64%
A	690-739	17.63%	50.38%	22.67%	8.06%	3.76%	6.18%	24.77%	23.95%
B	660-689	4.15%	20.41%	45.79%	19.31%	34.14%	6.65%	7.28%	18.39%
C	630-659	2.04%	4.04%	11.06%	23.93%	22.69%	35.54%	3.64%	7.78%
D	600-629	0.04%	0.55%	6.54%	23.30%	18.32%	22.03%	7.13%	5.14%
E	<600	0.20%	2.71%	4.47%	19.62%	18.38%	26.95%	7.63%	5.01%
Not Reported		0.17%	0.13%	2.10%	1.78%	0.00%	0.01%	6.41%	1.09%
Grand Total		**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

- Create migration matrix for total portfolio
- Original FICO and Current FICO

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Understanding Your Credit Portfolio

Sample Credit Union
Risk Change By Credit Score
For Period Ending 11/30/2012

Auto New

Dollar		Original FICO Grades							
Current FICO		A+	A	B	C	D	E	Not Reported	Grand Total
A+	740+	$ 1,924,155	$ 190,017	$ 125,943	$ -	$ -	$ -	$ 24,552	$ 2,264,668
A	690-739	$ 360,661	$ 447,450	$ 88,585	$ 40,169	$ -	$ -	$ 59,465	$ 996,330
B	660-689	$ 34,572	$ 162,575	$ 383,054	$ 116,649	$ 2,693	$ -	$ 36,524	$ 736,068
C	630-659	$ 13,286	$ 78,506	$ 148,554	$ 211,129	$ 58,047	$ -	$ 64,065	$ 573,588
D	600-629	$ -	$ 5,813	$ 97,333	$ -	$ 118,488	$ 48,928	$ 66,947	$ 337,508
E	<600	$ 19,031	$ 9,807	$ 57,657	$ 78,748	$ 94,839	$ 24,611	$ 24,402	$ 309,095
Not Reported		$ -	$ -	$ -	$ 4,118	$ -	$ -	$ 85,936	$ 90,054
Grand Total		$ 2,351,706	$ 894,168	$ 901,126	$ 450,813	$ 274,068	$ 73,538	$ 361,891	$ 5,307,311
Loans Not Risk Rated and Adjustments									$ -
Total in Portfolio									$ 5,307,311

Percent		Original FICO Grades							
Current FICO		A+	A	B	C	D	E	Not Reported	Grand Total
A+	740+	81.82%	21.25%	13.98%	0.00%	0.00%	0.00%	6.78%	42.67%
A	690-739	15.34%	50.04%	9.83%	8.91%	0.00%	0.00%	16.43%	18.77%
B	660-689	1.47%	18.18%	42.51%	25.88%	0.98%	0.00%	10.09%	13.87%
C	630-659	0.56%	8.78%	16.49%	46.83%	21.18%	0.00%	17.70%	10.81%
D	600-629	0.00%	0.65%	10.80%	0.00%	43.23%	66.53%	18.50%	6.36%
E	<600	0.81%	1.10%	6.40%	17.47%	34.60%	33.47%	6.74%	5.82%
Not Reported		0.00%	0.00%	0.00%	0.91%	0.00%	0.00%	23.75%	1.70%
Grand Total		100%	100%	100%	100%	100%	100%	100%	100%

Create migration matrix for each risk pool

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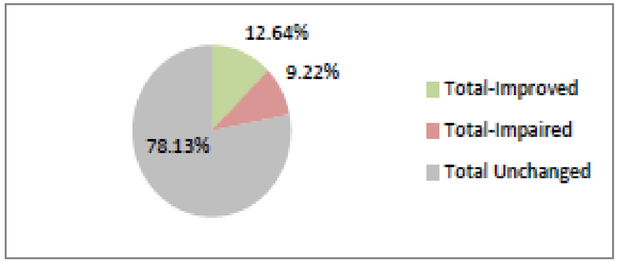
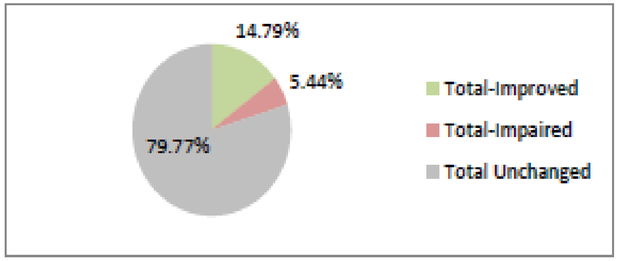
Understanding Your Credit Portfolio

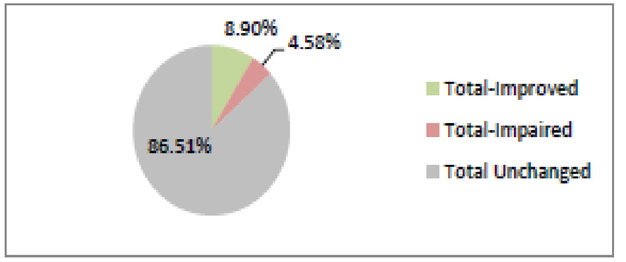
Auto New	$	%
Total-Improved	671,031	12.64%
Total-Impaired	489,592	9.22%
Total Unchanged	4,146,688	78.13%
Total In Portfolio	5,307,311	100%
Net Change	**$181,439**	**3.42%**



All Other Unsecured/LOC	$	%
Total-Improved	1,713,855	14.79%
Total-Impaired	631,051	5.44%
Total Unchanged	9,246,440	79.77%
Total In Portfolio	11,591,346	100%
Net Change	**$1,082,803**	**9.34%**



Mortgage Real Estate	$	%
Total-Improved	3,285,026	8.90%
Total-Impaired	1,691,581	4.58%
Total Unchanged	31,918,439	86.51%
Total In Portfolio	36,895,047	100%
Net Change	**$1,593,444**	**4.32%**



It is also important to partition loans by risk pools and apply the same analysis individually to each pool.

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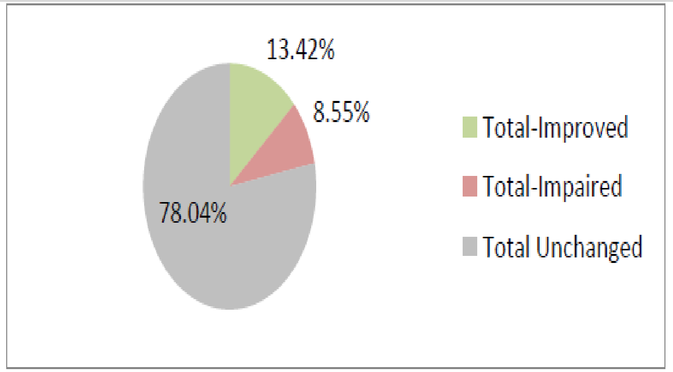
Understanding Your Credit Portfolio

Grand Total		
	$	%
Total-Improved	19,375,116	13.42%
Total-Impaired	12,338,956	8.55%
Total Unchanged	112,670,900	78.04%
Total In Portfolio	144,384,972	100%
Net Change	**$7,036,160**	**4.87%**



Create a net credit change calculation

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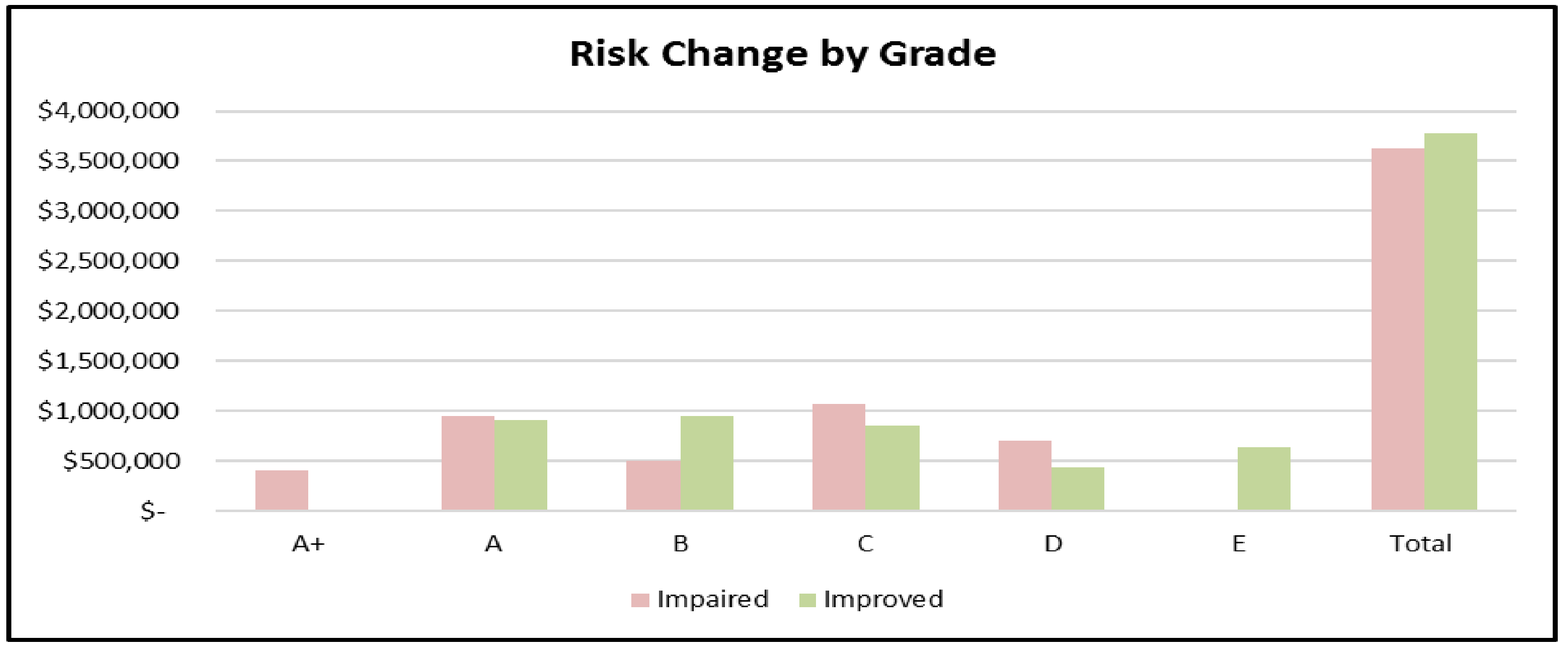

Net Risk Change

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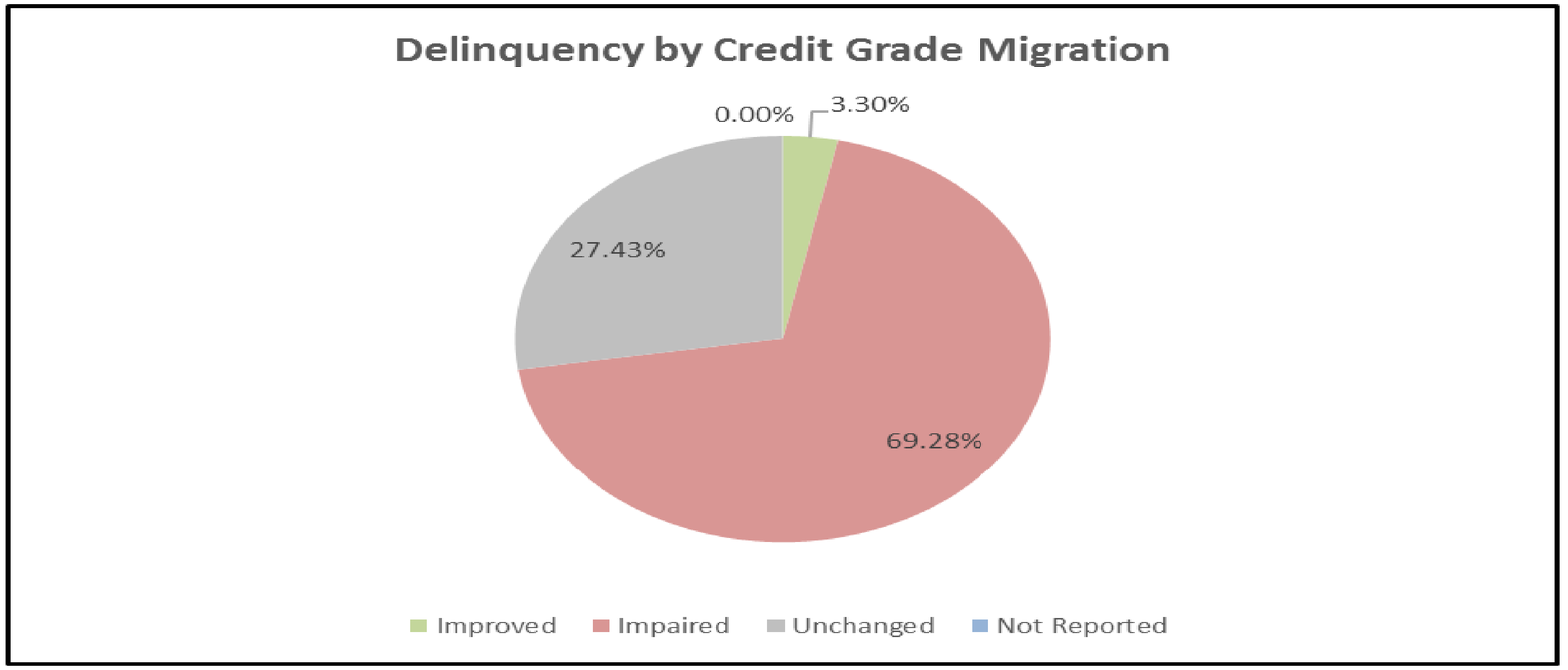

Delinquency by Change Group

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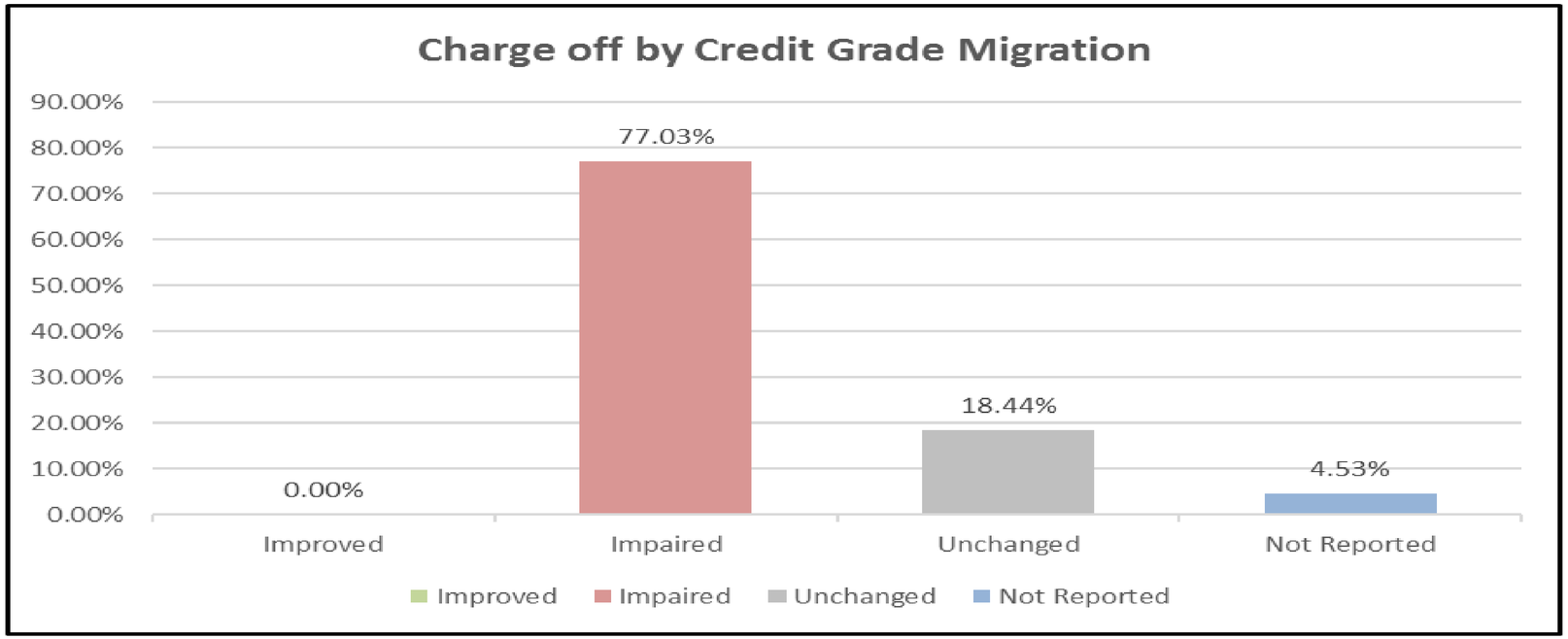
Understanding Your Credit Portfolio



Charge-Offs by Change Group

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Credit Migration

Understanding your Loan Portfolio
- Credit risk can Increase or Decrease
- Which risk pools are improving impairing?

Identifying Potential Problems
- **Isolate impaired loans and react to them early**
- **Understand the risk in your pools and adjust lending practices**

Identifying Emerging Opportunities
- Recognize Members that are making smart decisions
- Proactively offer ways to help your members
- Understand which pools of loans to take on more risk

Applying Precision in Allowance Calculation
- Statistically based calculation
- Complying to regulations

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Identify Potential Problems in the Portfolio

Dollar		Original FICO Grades							
Current FICO		A+	A	B	C	D	E	Not Reported	Grand Total
A+	740+	$ 33,886,855	$ 4,911,282	$ 1,696,945	$ 425,522	$ 105,543	$ 63,014	$ 3,184,419	$ 44,273,580
A	690-739	$ 7,886,015	$ 11,359,190	$ 5,212,544	$ 857,840	$ 146,917	$ 147,464	$ 1,828,060	$ 27,438,030
B	660-689	$ 1,857,191	$ 4,601,064	$ 10,527,101	$ 2,055,535	$ 1,333,417	$ 158,714	$ 537,630	$ 21,070,652
C	630-659	$ 910,286	$ 910,852	$ 2,541,847	$ 2,547,064	$ 886,367	$ 848,199	$ 268,658	$ 8,913,273
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Not Reported		$ 75,089	$ 29,047	$ 481,778	$ 189,437	$ -	$ 300	$ 472,982	$ 1,248,632
Grand Total		$ 44,724,643	$ 22,546,043	$ 22,990,809	$ 10,643,908	$ 3,905,658	$ 2,386,776	$ 7,381,182	$ 114,579,017

Drop of 2 or more credit gardes in an impaired FICO

60%-80% of Delinquencies and Charge-offs come from impaired FICO score loans

By responding early you can minimize losses

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Identifying Impaired Loans

RE	Post-Evaluation												
HH_ID	ACCT TYPE	Loan Pool	Original FICO for Report	Orig. Grade	SEP11 FICO	Current FICO For Report	Curr. Grade	1211M CURR BAL	1211M ORIG BAL	1211M CREDIT LIMIT	Current Value	LTV	Amount At Risk
200027920	L35	RE	745	A+	674	674	B	$ 16,689.00	$ 105,000.00	0		0.00%	$ -
200055284	L38	RE	765	A+	644	644	C	$ 89,083.00	$ 100,000.00	0		0.00%	$ -
200033992	L45	RE	759	A+	648	648	C	$ 3,848.00	$ 39,542.00	0		0.00%	$ -
200018742	L45	RE	724	A	657	657	C	$ 68,223.00	$ 111,846.00	0		0.00%	$ -
200018574	L45	RE	736	A	649	649	C	$ 75,500.00	$ 92,000.00	60600		0.00%	$ -
200018420	L45	RE	727	A	632	632	C	$ 31,206.00	$ 40,000.00	40000		0.00%	$ -
200018222	L45	RE	722	A	654	654	C	$ 41,932.00	$ 45,915.00	45000		0.00%	$ -
200017570	L38	RE	702	A	635	635	C	$ 15,072.00	$ 21,200.00	0		0.00%	$ -
200033876	L45	RE	699	A	539	539	E	$ 44,300.00	$ 52,859.00	0		0.00%	$ -
200051416	L45	RE	678	B	599	599	E	$ 38,382.00	$ 42,129.00	40000		0.00%	$ -
200033010	L52	RE	672	B	525	525	E	$ 463,065.00	$ 467,025.00	0		0.00%	$ -
200025234	L38	RE	686	B	553	553	E	$ 9,521.00	$ 12,000.00	0		0.00%	$ -
200023090	L45	RE	671	B	622	622	D	$ 64,079.00	$ 98,774.00	68000		0.00%	$ -
200019506	L45	RE	668	B	535	535	E	$ 96,517.00	$ 114,638.00	52400		0.00%	$ -
200044060	L45	RE	643	C	531	531	E	$ 53,248.00	$ 111,250.00	0		0.00%	$ -
200044028	L52	RE	654	C	573	573	E	$ 329,286.00	$ 330,000.00	0		0.00%	$ -
200030580	L45	RE	648	C	583	583	E	$ 11,000.00	$ 13,505.00	11000		0.00%	$ -
200020462	L45	RE	654	C	539	539	E	$ 35,556.00	$ 43,702.00	0		0.00%	$ -
200016786	L45	RE	644	C	598	598	E	$ 209,856.00	$ 257,346.00	0		0.00%	$ -
200006168	L45	RE	641	C	607	607	D	$ 6,700.00	$ 8,333.00	10000		0.00%	$ -

Identifying Impaired Loans

Loan Type	Balance	Original FICO	Original Grade	Current FICO	Current Grade	Open Date	Rate	Limit
Unsecured	$ 500	759	A+	617	D	2/8/2013	14.99%	$ 5,000

Bankruptcy Narrative

Act early and minimize exposure

- Quality cash flow and lifestyle
- Trauma to cash flow
- Switch from cash flow to unsecured debt
- Declare Bankruptcy

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Credit Migration

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Identifying Potential Problems
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Identifying Emerging Opportunities
- **Recognize Members that are making smart decisions**
- **Proactively offer ways to help your members**
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Applying Precision in Allowance Calculation
- Statistically based calculation
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Identifying Emerging Opportunities

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A	690-739	$ 7,886,015	$ 11,359,190	$ 5,212,544	$ 857,840	$ 146,917	$ 147,464	$ 1,828,060	**$ 27,438,030**
B	660-689	$ 1,857,191	$ 4,601,064	$ 10,527,101	$ 2,055,535	$ 1,333,417	$ 158,714	$ 537,630	**$ 21,070,652**
C	630-659	$ 910,286	$ 910,852	$ 2,541,847	$ 2,547,064	$ 886,367	$ 848,199	$ 268,658	**$ 8,913,273**
D	600-629	$ 17,970	$ 123,766	$ 1,503,642	$ 2,480,152	$ 715,706	$ 525,812	$ 526,391	**$ 5,893,438**
E	<600	$ 91,237	$ 610,842	$ 1,026,951	$ 2,088,359	$ 717,708	$ 643,272	$ 563,043	**$ 5,741,413**
Not Reported		$ 75,089	$ 29,047	$ 481,778	$ 189,437	$ -	$ 300	$ 472,982	**$ 1,248,632**
Grand Total		**$ 44,724,643**	**$ 22,546,043**	**$ 22,990,809**	**$ 10,643,908**	**$ 3,905,658**	**$ 2,386,776**	**$ 7,381,182**	**$ 114,579,017**

- Central mission of helping members
- Targeted marketing
- Increased loyalty
- Upsell opportunities

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Identifying Improved Loans

	A	B	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
1	Credit Grade Improved 3/31/2013																			
2	Member #	Loan Suffix	Loan Type	Loan Pool	Current Balance	Original Credit Score	Original Credit Grade	Current Credit Score	Current Credit Score	Open Date	Interest Rate	Days DQ	Original Loan Amount	Balance at Other Lender (2nd Mortgage and	Total Loans	Total Available Credit (Lines of Credit, Credit Cards and	Collateral Value (for unsecured loans, leave blank)	LTV	Years loan has been on books	$ of Pricipal Paid
3	1746	10	2	Real Estate	$ 31,769.96	692	B	789	A+	10/1/2005	4.25%	0	$ 47,000.00	$ 156,281.00	$ 188,050.96	$ 47,000.00	$ 400,000.00	47%	7.50	$ 15,230.04
4	1005	10	2	Real Estate	$ 25,517.11	557	E	677	B	4/19/2006	4.25%	0	$ 50,000.00	$ 300,000.00	$ 325,517.11	$ 50,000.00	$ 450,000.00	72%	6.95	$ 24,482.89
5	1006	10	2	Real Estate	$ 35,168.30	533	E	663	C	3/13/2009	4.78%	0	$ 44,000.00	$ 230,000.00	$ 265,168.30	$ 44,000.00	$ 400,000.00	66%	4.05	$ 8,831.70
6	1007	10	9	Real Estate	$ 15,989.59	563	E	632	D	5/31/2007	8.05%	0	$ 30,500.00		$ 15,989.59	$ -	$ 150,000.00	11%	5.84	$ 14,510.41
7	1019	10	6	Unsecured	$ 1,865.61	563	E	675	B	2/16/2011	7.50%	0	$ 5,000.00		$ 1,865.61	$ -	$ 5,000.00	37%	2.12	$ 3,134.39
8	1029	10	6	Unsecured	$ 8,159.77	590	E	669	C	5/23/2012	9.00%	0	$ 10,000.00		$ 8,159.77	$ -	$ 10,000.00	82%	0.85	$ 1,840.23
9	1030	10	6	Unsecured	$ 14,862.62	571	E	650	C	5/3/2012	8.73%	0	$ 18,021.94		$ 14,862.62	$ -	$ 18,021.94	82%	0.91	$ 3,159.32
10	1034	10	6	Unsecured	$ 4,286.21	554	E	650	C	4/8/2011	7.50%	0	$ 10,000.00		$ 4,286.21	$ -	$ 10,000.00	43%	1.98	$ 5,713.79
11	1950	10	1	Vehicle	$ 16,772.08	697	B	707	A	10/13/2012	2.00%	0	$ 17,684.20		$ 16,772.08	$ -	$ 15,000.00	112%	0.46	$ 912.12
12	2322	10	1	Vehicle	$ 36,732.12	733	A	749	A+	2/18/2013	3.49%	0	$ 37,178.40		$ 36,732.12	$ -	$ 35,000.00	105%	0.11	$ 446.28
13	2326	10	1	Vehicle	$ 22,699.08	720	A	801	A+	12/10/2012	1.90%	0	$ 24,240.37		$ 22,699.08	$ -	$ 25,000.00	91%	0.30	$ 1,541.29
14	2329	10	1	Vehicle	$ 28,045.15	735	A	744	A+	11/8/2012	2.00%	0	$ 29,584.82		$ 28,045.15	$ -	$ 25,000.00	112%	0.39	$ 1,539.67
15	2330	10	1	Vehicle	$ 15,868.89	706	A	772	A+	11/2/2012	1.90%	0	$ 18,150.00		$ 15,868.89	$ -	$ 12,000.00	132%	0.41	$ 2,281.11
16	2335	10	1	Vehicle	$ 34,567.82	738	A	757	A+	10/9/2012	1.99%	0	$ 36,907.00		$ 34,567.82	$ -	$ 23,500.00	147%	0.47	$ 2,339.18
17	1000	1000	5	Vehicle	$ 4,475.05	597	E	750	A+	10/12/2010	11.15%	0	$ 6,261.17		$ 4,475.05	$ -	$ 2,175.00	206%	2.47	$ 1,786.12
18	1001	1001	5	Vehicle	$ 3,902.40	554	E	630	D	7/23/2010	8.29%	0	$ 6,546.45		$ 3,902.40	$ -	$ 10,750.00	36%	2.69	$ 2,644.05
19	1002	1002	5	Vehicle	$ 3,608.73	597	E	604	D	7/27/2007	13.31%	0	$ 10,029.61		$ 3,608.73	$ -	$ 2,475.00	146%	5.68	$ 6,420.88
20	1003	1003	4	Pledge	$ 81,915.45	577	E	770	A+	8/25/2006	3.75%	0	$ 100,000.00		$ 81,915.45	$ -	$ -	No Value	6.60	$ 18,084.55
22	1008	1008	6	Unsecured	$ 9,555.28	578	E	721	A	11/24/2010	16.00%	0	$ 12,751.98		$ 9,555.28	$ 12,751.98	$ -	No Value	2.35	$ 3,196.70
23	1009	1009	6	Unsecured	$ 1,629.90	591	E	705	A	6/9/2010	0.00%	0	$ -		$ 1,629.90	$ -	$ -	No Value	2.81	$ -
24	1010	1010	6	Unsecured	$ 423.48	569	E	720	A	3/28/2008	15.00%	0	$ 500.00		$ 423.48	$ 500.00	$ -	No Value	5.01	$ 76.52
25	1011	1011	6	Unsecured	$ -	573	E	707	A	5/19/2005	15.00%	0	$ 1,000.00		$ -	$ 1,000.00	$ -	No Value	7.87	$ 1,000.00
26	1012	1012	6	Unsecured	$ 2,689.15	577	E	709	A	4/27/2005	0.00%	0	$ -		$ 2,689.15	$ -	$ -	No Value	7.93	$ -
27	1013	1013	6	Unsecured	$ 80.94	599	E	784	A+	12/17/2008	0.00%	0	$ -		$ 80.94	$ -	$ -	No Value	4.29	$ -
28	1014	1014	6	Unsecured	$ (7.64)	597	E	753	A+	6/13/2008	0.00%	0	$ -		$ (7.64)	$ -	$ -	No Value	4.80	$ 7.64
29	1015	1015	6	Unsecured	$ 557.09	591	E	760	A+	10/23/2007	0.00%	0	$ -		$ 557.09	$ -	$ -	No Value	5.44	$ -
30	1016	1016	6	Unsecured	$ -	599	E	783	A+	11/17/2006	0.00%	0	$ -		$ -	$ -	$ -	No Value	6.37	$ -
31	1017	1017	6	Unsecured	$ -	578	E	755	A+	8/18/2005	15.00%	0	$ 500.00		$ -	$ 500.00	$ -	No Value	7.62	$ 500.00
32	1018	1018	6	Unsecured	$ 320.89	520	E	748	A+	4/18/2005	15.00%	0	$ 500.00		$ 320.89	$ 500.00	$ -	No Value	7.96	$ 179.11
33	1020	1020	6	Unsecured	$ 6.97	598	E	694	B	11/27/2009	0.00%	0	$ -		$ 6.97	$ -	$ -	No Value	3.34	$ -
34	1021	1021	6	Unsecured	$ 786.97	585	E	699	B	4/24/2009	15.00%	0	$ 1,000.00		$ 786.97	$ 1,000.00	$ -	No Value	3.94	$ 213.03
35	1022	1022	6	Unsecured	$ -	562	E	687	B	1/27/2009	15.00%	0	$ 500.00		$ -	$ 500.00	$ -	No Value	4.18	$ 500.00
36	1023	1023	6	Unsecured	$ 500.00	592	E	682	B	12/5/2008	15.00%	0	$ 500.00		$ 500.00	$ 500.00	$ -	No Value	4.32	$ -
37	1024	1024	6	Unsecured	$ -	592	E	693	B	7/26/2007	15.00%	0	$ 200.00		$ -	$ 200.00	$ -	No Value	5.68	$ 200.00
38	1025	1025	6	Unsecured	$ 444.72	526	E	675	B	4/16/2007	0.00%	0	$ -		$ 444.72	$ -	$ -	No Value	5.96	$ -

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Identifying Improved Loans

Loan Type	Balance	Original FICO	Original Grade	Current FICO	Current Grade	Open Date	Rate
New Auto	$ 18,432	645	C	787	A+	4/18/2012	6.50%

Improved FICO Opportunities

Additional Services Extended to Member	Impact for Credit Union	Imact for Member
VISA	$37,500 in new loan balances	Reduced interest rate and interest cost on loans
HELOC	$1,000 interchange income for debit transactions	Enhanced ability to access effective loans
DEBIT CARD		

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Credit Migration

Understanding your Loan Portfolio
- Credit risk can Increase or Decrease
- Which risk pools are improving impairing?

Identifying Potential Problems
- Isolate impaired loans and react to them early
- Understand the risk in your pools and adjust lending practices

Identifying Emerging Opportunities
- Recognize Members that are making smart decisions
- Proactively offer ways to help your members
- Understand which pools of loans to take on more risk

Applying Precision in Allowance Calculation
- **Statistically based calculation**
- **Complying to regulations**

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ALLL- Homogeneous Pools

Sample CU
ALLL Amount Needed Calculation
Period Ending 3/31/12

Visa	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount
Total	$ 785,164.07	$ -	$ 785,164.07	2.47%		$ 19,367.74

Unsecured	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount
Total	$ 806,320.57	$ -	$ 806,320.57	3.90%		$ 31,470.10

New Auto	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount
Total	$ 3,969,638.65	$ 103,006.94	$ 3,866,631.71	0.18%		$ 6,977.06

Used Auto	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount
Total	$ 1,679,782.66	$ 66,592.23	$ 1,613,190.43	1.74%		$ 28,082.43

Real Estate	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount
Total	$ 5,346,172.03	$ 265,049.18	$ 5,081,122.85	0.00%		$ -

All Other	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount
Total	$ 1,519,992.75	$ 34,193.30	$ 1,485,799.45	0.91%		$ 13,532.31

MBL	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate		ALLL Amount
Total	$ 167,796.35	$ -	$ 167,796.35	0.00%		$ -

Participation Loans	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance	Loss Rate		ALLL Amount
Total	$ 339,851.87	$ -	$ 339,851.87	0.27%		$ 925.22

	Balance	Indiv. Ident. Lns. Bal.	Ln Loss Calc Balance		Total ALLL Amount
ALLL Amount Needed-FAS 5	$14,614,719	$468,842	$14,145,877		$ 100,354.87

Traditional Pooled ALLL Approach

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Risk Based ALLL W/Credit Migration

Maintain existing pools

Divide pool balances into credit grade ranges

Create unique loss ratios for each grade within each pool

Monitor changing credit scores for movement in pools

Calculated ALLL requirement for each grade within each pool

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ALLL- Homogeneous Pools

Sample CU
ALLL Amount Needed Calculation
Period Ending 3/31/12

Visa	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount	ALLL Amount	Comparison
A+	$ 259,369.55	0.00%	$ -	Risk Based	Pooled Method	
A	$ 168,938.10	0.00%	$ -			
B	$ 138,468.94	0.86%	$ 1,197.27			
C	$ 100,397.26	0.00%	$ -			
D	$ 17,814.59	11.38%	$ 2,028.07			
E	$ 100,175.61	13.64%	$ 13,662.42			
Missing	$ -	0.00%	$ -			
Total	$ 785,164.07	2.47%		**$ 16,887.76**	**$ 19,367.74**	**$ (2,479.98)**

Unsecured	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount	ALLL Amount	Comparison
A+	$ 282,089.23	0.00%	$ -	Risk Based	Pooled Method	
A	$ 242,048.59	0.00%	$ -			
B	$ 119,065.98	7.94%	$ 9,456.25			
C	$ 126,613.88	7.74%	$ 9,803.43			
D	$ 9,941.55	18.84%	$ 1,872.55			
E	$ 26,561.36	23.75%	$ 6,308.24			
Missing	$ -	0.00%	$ -			
Total	$ 806,320.57	3.90%		**$ 27,440.48**	**$ 31,470.10**	**$ (4,029.62)**

Sections Omitted for Presentation

All Other	Ln Loss Calc Balance	Loss Rate	ALLL Amount	ALLL Amount	ALLL Amount	Comparison
A+	$ 1,010,677.61	0.00%	$ -	Risk Based	Pooled Method	
A	$ 191,354.97	0.00%	$ -			
B	$ 198,588.23	0.00%	$ -			
C	$ 60,805.07	0.00%	$ -			
D	$ 17,620.90	0.00%	$ -			
E	$ 6,334.44	21.40%	$ 1,355.76			
Missing	$ 418.23	0.00%	$ -			
Total	$ 1,485,799.45	0.91%		**$ 1,355.76**	**$ 13,532.31**	**$ (12,176.56)**

MBL	Ln Loss Calc Balance	Loss Rate		ALLL Amount	ALLL Amount	Comparison
Total	$ 167,796.35	0.00%		**$ -**	**$ -**	**$ -**

Participation Loans	Ln Loss Calc Balance	Loss Rate		ALLL Amount	ALLL Amount	Comparison
Total	$ 339,851.87	0.27%		**$925.22**	**$ 925.22**	**$ -**

	Ln Loss Calc Balance		Total ALLL Amount	Total ALLL Amount	Difference
ALLL Amount Needed-FAS 5	$14,145,877		**$ 83,416.44**	**$ 100,354.87**	**$ (16,938.43)**

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Risk Based CECL Compliant Approach

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Considerations

Early planning makes a huge difference

Understand the impacts on initial transfer

Understand the impacts from growth and operations

Plan for increases in ALLL requirements

Assure your pricing accurately measures CECL impact

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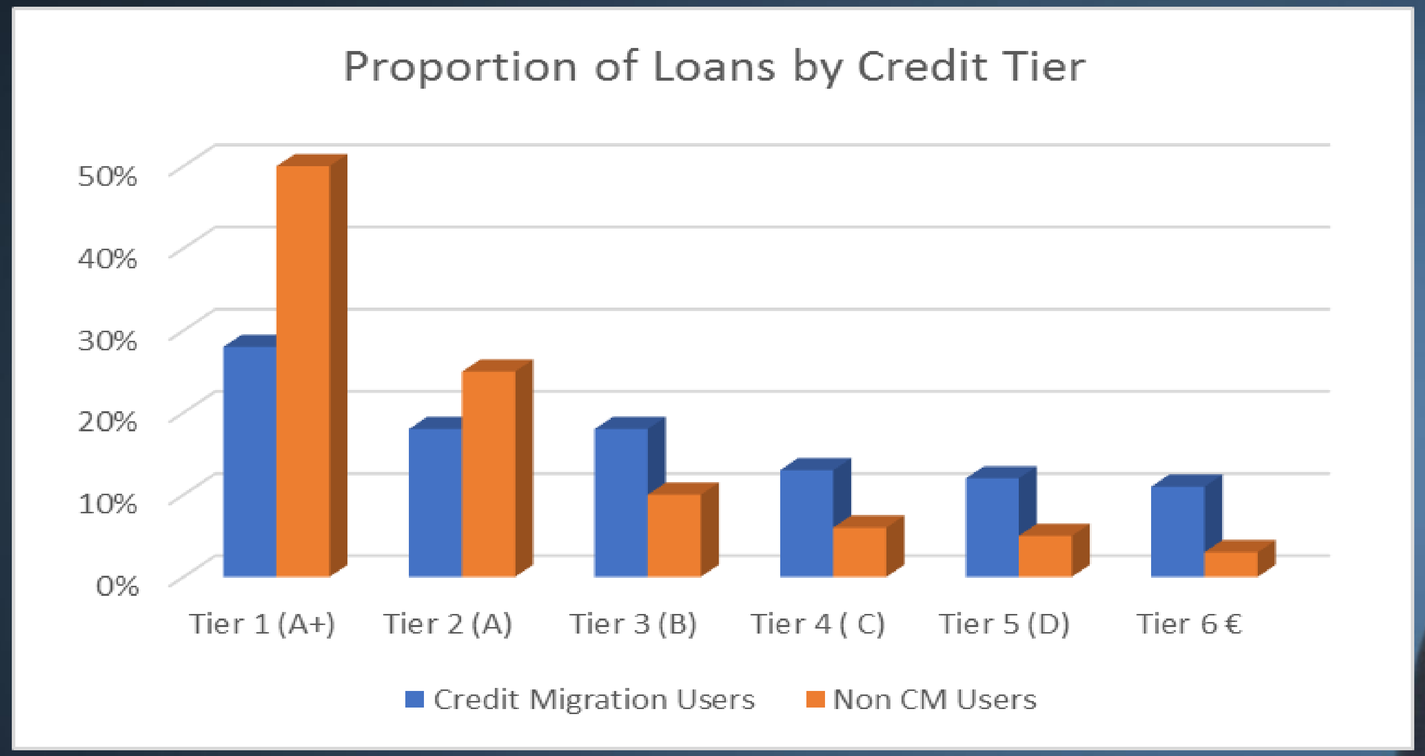
What are the bottom line impacts?



Credit Migration Users are able to lend deeper.

What are the bottom line impacts?

Net Credit Scores are nearly **93%** higher!

- Credit Migration Users +7.3%
- Non-CM Users +4.1%

Credit Migration users are able to lend more effectively.

What are the bottom line impacts?

Average Credit Union ROA increased nearly **95%**

- Credit Migration Users 0.70
- Non-CM Users 0.41

Credit Migration users are able to lend more profitably.

What are the bottom line impacts?

- Loan yields increase by **34** basis points by enhancing C,D and E lending
- Delinquencies declined to **0.35%**
- Charge-off ratio declined to **0.16%**
- Loan to share increased to **83%**

These factors combine to enhance income and strengthen equity

Final notes of caution

- Credit Migration system must be statistically valid to achieve maximum benefit
- Simply tracking scores will not provide maximum benefits
- A statistically valid model establishes accurate score ranges and risk analyses

FOR MORE INFORMATION OR TO SCHEDULE A DEMO

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