

# Estimating CECL's Impact on Your Community Bank

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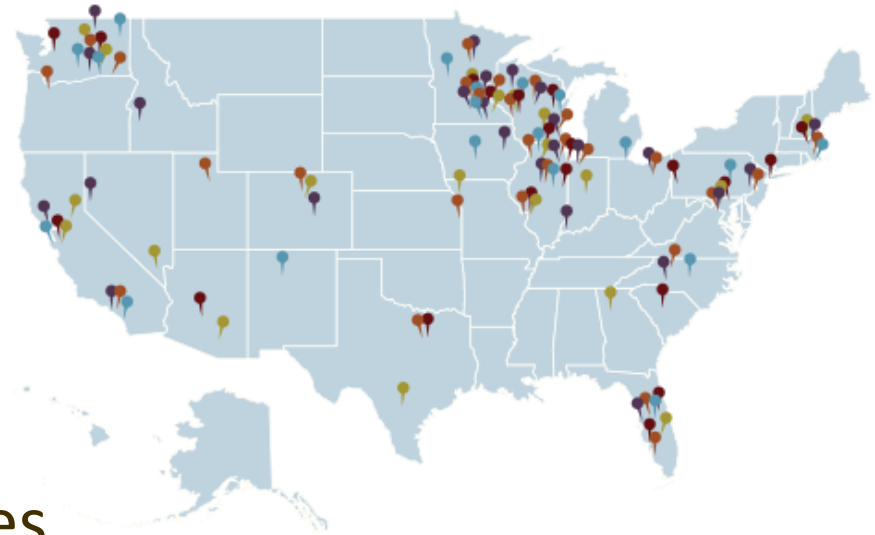
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# About CliftonLarsonAllen

- A professional services firm with three distinct business lines
  - Wealth Advisory
  - Outsourcing
  - Audit, Tax, and Consulting
- Serve more than 1,800 financial institutions
- More than 5,000 employees
- Offices coast to coast



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# Your Instructors: David Heneke

- David is a principal with CLA's financial institutions team. He began his career with CliftonLarsonAllen in 2005 and has eleven years of experience working with financial institutions.
- David focuses on audits, internal audits, FDICIA/SOX compliance, mergers and acquisitions, and HUD FHA compliance for community banks. His clients range from \$50 million to \$2 billion in assets. He performs training for banks across the country in the areas of internal audit and acquisition accounting.



# Your Instructors: Josh Juergensen

- Josh is a principal with CLA's financial institutions team. He began his career with CliftonLarsonAllen in 2006 and has eleven years of experience working with financial institutions.
- Josh devotes 100 percent of his time serving financial institutions with varying levels of complexity, and asset sizes ranging from \$25 million to more than \$5 billion. He focuses on certified audits, directors' examinations, internal audits, loan file reviews, and other consulting services.



# What We Hope You Take Away

- High level understanding of the standard's requirements and implementation timelines
- Possible model options and how to use these models to begin to estimate your number
- How to utilize call report information to estimate the impact of the new standard using the CECL Estimator tool



# POLLING QUESTION







# The Standard

*ASC 326 Financial Instruments – Credit Losses:  
Measurement of Credit Losses on Financial  
Instruments*

# CECL Overview

- Issued June 16, 2016
- Measure expected losses over life of loan
- [http://www.fasb.org/cs/ContentServer?c=Document\\_C&pagename=FASB%2FDocument\\_C%2FDocument\\_Page&cid=1176168232528](http://www.fasb.org/cs/ContentServer?c=Document_C&pagename=FASB%2FDocument_C%2FDocument_Page&cid=1176168232528)



# ALLL Amount

- Unadjusted historical lifetime loss experience
- Plus or minus: Q Factor adjustments
- Plus or minus: adjustment for reasonable and supportable forecasts
- Equals: ALLL





# Implementation Timeline

*How Far Along Do I Need to Be and Who Needs to Be Involved?*

# Effective Dates for Banks with Calendar Year-Ends

Entities	Document(s)	Effective date
SEC filers	10-Q and Call Report	March 2020
Non-SEC public business entities	Call Report	March 2021
All other entities	Financial statements and Call Report	December 2021



# Public Business Entity

- Public Business Entity Conclusion
  - Current evaluation
  - Re-evaluation
- Need procedures to support initial conclusion and update annually, or more frequently if circumstances require

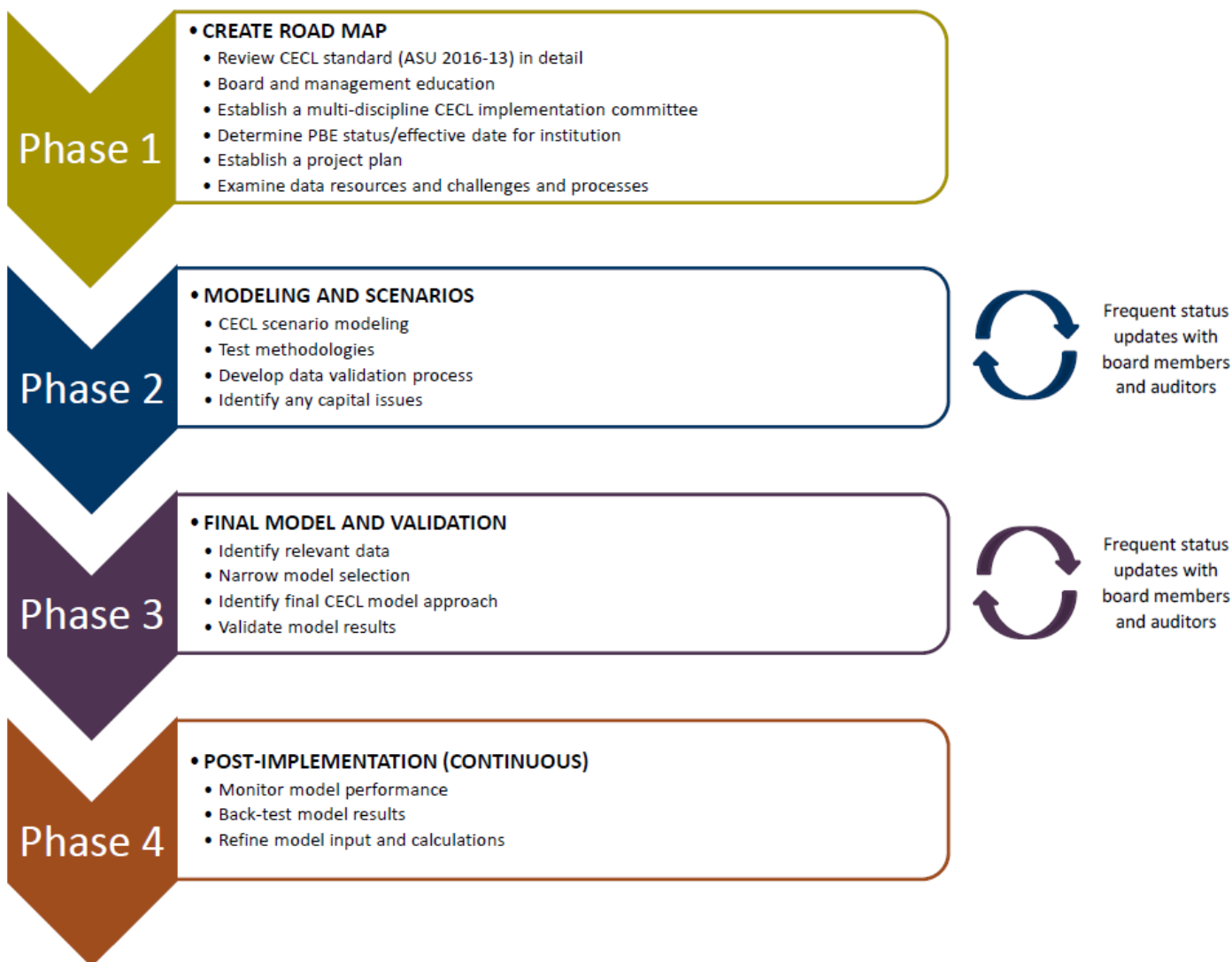


# Public Business Entity

- Entities not meeting the definition of a Public Business Entity
  - Most banks with assets under \$500 million
  - S Corporations with contractual agreements restricting sale or transfer to preserve the S Corp election
  - Mutuals



# CECL Implementation Approach





# SMALL BANKS DO NOT NEED BIG MODELS!





# Model Selection

*How Do I Decide What Model to Use?*

# Available Methods

- Very flexible
- Choice of methods include:
  - Loss-rate methods
  - Probability of default and loss given default
  - Migration analysis
  - Vintage analysis
- **Any reasonable approach or approaches may be used – guidance is not prescriptive.**



# Let's Look at Live Data

- We are going to look at three example models based on a real bank's loan data:
  - Discounted Cash Flow/Probability/Loss Given Default Analysis
  - Static Pool/Migration Analysis
  - Vintage Analysis



# Discounted Cash Flow/Probability of Default

- Define Inputs To Develop Cash Flow Streams

ALLL Code	Recovery Lag (Months)	Annual Condition Prepayment Rates	Prepayment Monthly Ratio	Annual Default Rate	Default Monthly Ratio	Severity/Loss Given Default
1-4 Family 1st Lien Closed	6	6.00%	0.5143%	1.00%	0.0837%	10.00%
1-4 Family Construction	6	6.00%	0.5143%	2.00%	0.1682%	30.00%
1-4 Family Junior Lien Closed	6	6.00%	0.5143%	1.00%	0.0837%	10.00%
1-4 Family Revolving	6	6.00%	0.5143%	1.00%	0.0837%	10.00%
Agriculture	6	6.00%	0.5143%	1.00%	0.0837%	20.00%
Agriculture Real Estate	6	6.00%	0.5143%	1.00%	0.0837%	20.00%
Automobiles	6	6.00%	0.5143%	1.00%	0.0837%	10.00%
Commercial & Industrial	6	6.00%	0.5143%	1.00%	0.0837%	20.00%
Commercial Real Estate	6	6.00%	0.5143%	2.00%	0.1682%	30.00%
Construction and Land Development	6	6.00%	0.5143%	2.00%	0.1682%	30.00%

# Discounted Cash Flow/Probability of Default

- Develop Cash Flow Expectation

	Period	1	2	3	4	5
Note Number	NPV					
69316	5,502.55	105.16	104.72	104.27	103.82	103.38
49425	21,966.68	2,788.87	19,302.16	-	-	-
54665	19,656.71	273.72	272.74	271.75	270.77	269.79
69514	5,050.18	147.94	147.29	146.63	145.98	145.33
70159	21,126.93	595.88	593.27	590.67	588.06	585.46
58966	71,967.84	2,198.89	2,189.12	2,179.37	2,169.63	2,159.89
69300	73,503.43	1,304.10	1,298.98	1,293.86	1,288.75	1,283.64
71075	20,519.57	350.49	349.13	347.77	346.41	345.05
71391	18,955.87	1,308.68	1,302.36	1,296.04	1,289.73	1,283.42
515	23,965.03	472.32	470.30	468.29	466.28	464.28
69481	64,357.15	1,305.26	1,299.93	1,294.61	1,289.29	1,283.98
69484	99,802.55	1,052.56	1,048.02	1,043.50	1,038.99	1,034.50
69453	68,379.84	1,119.35	1,114.77	1,110.20	1,105.63	1,101.08

# Discounted Cash Flow/Probability of Default

- Compared NPV to Current Balance

Note Numl	ALLL Category	Balance	NPV	ALLL
60937	Other Consumer Loans	-	-	-
63918	Commercial & Industrial	-	-	-
69316	Other Consumer Loans	5,518.79	5,502.55	16.24
49425	Construction and Land Development	21,988.56	21,966.68	21.88
54665	1-4 Family 1st Lien Closed	19,751.39	19,656.71	94.68
69514	Commercial & Industrial	5,068.53	5,050.18	18.35
70159	Commercial & Industrial	21,206.93	21,126.93	80.00
58966	Commercial & Industrial	72,217.71	71,967.84	249.87
69300	Commercial & Industrial	73,924.01	73,503.43	420.58
71075	Commercial & Industrial	20,639.60	20,519.57	120.03
71391	Commercial & Industrial	18,984.39	18,955.87	28.52
515	Commercial & Industrial	24,090.00	23,965.03	124.97
69481	Commercial & Industrial	64,693.91	64,357.15	336.76
69484	Commercial Real Estate	103,011.23	99,802.55	3,208.68
69453	1-4 Family Revolving	68,601.63	68,379.84	221.79
71398	Commercial & Industrial	38,554.95	38,445.38	109.57
72240	Commercial & Industrial	59,946.98	59,591.87	355.11
68715	Automobiles	2,070.18	2,066.12	4.06
68953	Commercial & Industrial	18,448.50	18,369.21	79.29
71335	Construction and Land Development	169,805.46	169,631.18	174.28
70314	Agriculture	35,801.51	35,605.23	196.28
72222	Automobiles	2,610.93	2,602.92	8.01
69723	Other Consumer Loans	-	-	-



# Static Pool Analysis Average Loss Rates for HELOC and 2<sup>nd</sup> REM

Loan Type	12.31.09	12.31.10	12.31.11	12.31.12	Average Lifetime Loss Rate	Current Balance	Expected Lifetime Losses
	Loan Lifetime Loss Rate	Loan Lifetime Loss Rate	Loan Lifetime Loss Rate	Loan Lifetime Loss Rate			
1-4 Family Junior Lien Closed 1 PASS	0.00%	0.00%	0.49%	0.00%	0.12%	8,369,403	10,166
1-4 Family Junior Lien Closed 2 WATCH	0.00%	0.00%	0.00%	0.00%	0.00%	26,195	-
1-4 Family Junior Lien Closed 4 SUBSTANDARD	6.87%	36.08%	3.36%	38.22%	21.13%	86,658	18,313
1-4 Family Revolving 1 PASS	0.00%	0.00%	0.00%	0.00%	0.00%	22,017,152	-
1-4 Family Revolving 4 SUBSTANDARD	0.00%	0.00%	0.00%	77.72%	19.43%	158,760	30,845
<b>Totals</b>						30,658,167	59,325
<b>ALLL Percentage</b>							0.19%





# Static Pool Analysis Average Loss Rates for C&I and CRE

Loan Type	12.31.09	12.31.10	12.31.11	12.31.12	Average Lifetime Loss Rate	Current Balance	Expected Lifetime Losses
	Loan Lifetime Loss Rate	Loan Lifetime Loss Rate	Loan Lifetime Loss Rate	Loan Lifetime Loss Rate			
Commercial & Industrial 1 PASS	0.32%	0.06%	2.31%	0.14%	0.71%	144,638,430	1,021,963
Commercial & Industrial 2 WATCH	7.20%	5.01%	4.75%	0.67%	4.41%	8,222,738	362,567
Commercial & Industrial 3 SPECIAL MENTION	38.17%	0.00%	0.00%	0.00%	9.54%	5,605	535
Commercial & Industrial 4 SUBSTANDARD	15.78%	36.24%	100.00%	63.23%	53.81%	12,567,544	6,762,613
Commercial & Industrial 5 DOUBTFUL	90.85%	0.00%	0.00%	0.00%	22.71%	-	-
Commercial & Industrial 6 LOSS	0.00%	0.00%	0.00%	0.00%	0.00%	-	-
Commercial Real Estate 1 PASS	1.15%	0.28%	1.33%	1.64%	1.10%	245,021,089	2,698,152
Commercial Real Estate 2 WATCH	6.77%	0.00%	0.00%	0.00%	1.69%	10,674,754	180,739
Commercial Real Estate 3 SPECIAL MENTION	1.49%	12.33%	14.80%	0.00%	7.15%	524,392	37,515
Commercial Real Estate 4 SUBSTANDARD	17.94%	8.19%	8.62%	9.78%	11.13%	27,099,768	3,017,394
Commercial Real Estate 5 DOUBTFUL	4.11%	0.00%	34.87%	100.00%	34.75%	-	-
<b>Totals</b>						448,754,319	14,081,477
<b>ALLL Percentage</b>							3.14%



# Static Pool Analysis Weighted Average Losses for HELOC and 2<sup>nd</sup> REM

Loan Type	(1)	(2)	(3) = (1)/(2)	(4)	(5) = (3)x(4)
	Total Charge Offs	Total Loans In Pools	Three Year Weighted Average Loss Rate	Current Principal Balance	ALLL Without Q Factors
1-4 Family Junior Lien Closed 1 PASS	82,327	44,644,192	0.18%	8,369,403	15,434
1-4 Family Junior Lien Closed 2 WATCH	-	275,269	0.00%	26,195	-
1-4 Family Junior Lien Closed 4 SUBSTANDARD	95,956	429,460	22.34%	86,658	19,362
1-4 Family Revolving 1 PASS	-	139,152,113	0.00%	22,017,152	-
1-4 Family Revolving 2 WATCH	-	584,039	0.00%	-	-
1-4 Family Revolving 3 SPECIAL MENTION	-	188,756	0.00%	-	-
1-4 Family Revolving 4 SUBSTANDARD	24,281	130,962	18.54%	158,760	29,435
<b>Totals</b>				30,658,167	64,231
<b>ALLL Percentage</b>					0.21%



# Static Pool Analysis

## Weighted Average Losses for C&I and CRE

	(1)	(2)	(3) = (1)/(2)	(4)	(5) = (3)x(4)
			Three Year Weighted Average Loss Rate	Current Principal Balance	ALLL Without Q Factors
Loan Type	Total Charge Offs	Total Loans In Pools			
Commercial & Industrial 1 PASS	3,882,523	430,450,122	0.90%	144,638,430	1,304,592
Commercial & Industrial 2 WATCH	626,243	13,209,898	4.74%	8,222,738	389,816
Commercial & Industrial 3 SPECIAL MENTION	4,773,482	18,144,388	26.31%	5,605	1,475
Commercial & Industrial 4 SUBSTANDARD	20,196,893	38,383,595	52.62%	12,567,544	6,612,860
Commercial & Industrial 5 DOUBTFUL	97,301	107,104	90.85%	-	-
Commercial Real Estate 1 PASS	10,825,492	974,768,034	1.11%	245,021,089	2,721,133
Commercial Real Estate 2 WATCH	1,354,714	72,567,994	1.87%	10,674,754	199,278
Commercial Real Estate 3 SPECIAL MENTION	3,175,845	61,663,252	5.15%	524,392	27,008
Commercial Real Estate 4 SUBSTANDARD	18,635,333	170,882,681	10.91%	27,099,768	2,955,321
Commercial Real Estate 5 DOUBTFUL	648,772	2,951,419	21.98%	-	-
			<b>Totals</b>	448,754,319	14,211,484
			<b>ALLL Percentage</b>		3.17%



# Vintage Analysis

- Compute Loss Rates by Origination Year

Row Labels	Sum of Total Originations	Year 1 Loss Rate	Year 2 Loss Rate	Year 3 Loss Rate	Year 4 Loss Rate	Year 5 Loss Rate	Total Loss Rate
COMMERCIAL LOANS	790,158,000.00	0.00%	-2.41%	-0.50%	0.00%	-0.10%	-3.01%
2010	38,080,000.00	0.00%	-4.12%	-2.44%	0.00%	-0.13%	-6.69%
2011	50,523,000.00	0.00%	0.00%	-1.14%	0.00%	0.00%	-1.14%
2012	80,539,000.00	0.00%	-0.53%	0.00%	0.00%	N/A	-0.53%
2013	74,256,000.00	0.00%	0.00%	-0.12%	N/A	N/A	-0.12%
2014	113,181,000.00	0.00%	0.00%	N/A	N/A	N/A	0.00%
2015	103,824,000.00	0.00%	N/A	N/A	N/A	N/A	0.00%

- Multiply Loss Rates By Where the Loan is in the Lifecycle

Row Labels	Sum of Total Originations	Year 1	Year 2	Year 3	Year 4	Year 5	Total Expected Losses
COMMERCIAL LOANS	790,158,000.00	-	(5,229,820.50)	(1,456,305.00)	-	(422,323.00)	(7,108,448.50)
2011	50,523,000.00	-	-	-	-	(50,523.00)	(50,523.00)
2012	80,539,000.00	-	-	-	-	(80,539.00)	(80,539.00)
2013	74,256,000.00	-	-	(371,280.00)	-	(74,256.00)	(445,536.00)
2014	113,181,000.00	-	(2,727,662.10)	(565,905.00)	-	(113,181.00)	(3,406,748.10)
2015	103,824,000.00	-	(2,502,158.40)	(519,120.00)	-	(103,824.00)	(3,125,102.40)





# Estimating the Impact

*How do we determine what the potential impact of the standard may be?*

# Should the Bank Increase its ALLL in Anticipation of CECL?

# NO!



# Current Allowance Levels (As of 3/31/2017)

		Impaired ALLL as % of Loans	Collective Allowance as % of Loans	Purchased Impaired Allowance as % of Loans	Total Allowance as % of Loans
Real Estate Construction		5.46%	1.22%	4.98%	1.28%
Commercial Real Estate		4.73%	0.82%	2.38%	0.88%
Residential Real Estate		6.94%	0.54%	1.41%	0.64%
Commercial Loans		14.15%	1.13%	2.03%	1.31%
Credit Cards		27.35%	3.80%	27.28%	4.03%
Other Consumer Loans		11.42%	0.96%	2.12%	1.03%
Unallocated		N/A	N/A	N/A	N/A
Total		10.87%	1.23%	1.88%	1.34%

Impaired Allowance %	8.72%
Collective %	87.96%
Purchased Credit %	1.83%
Unallocated %	1.49%
	100.00%



# Industry Wide Net Charge-Off Data

Gross Loan Call Code	Description	12/31/2016	12/31/2015	12/31/2014	12/31/2013	12/31/2012
RCONF158	LN SECURED BY 1-4 FAM RES CONSTRUCTI	-0.08%	0.02%	0.14%	0.38%	1.12%
RCONF159	LN SECURED BY OTHR CNSTRCTN LN & LA	-0.02%	-0.03%	-0.02%	0.27%	1.31%
RCON1420	R.E. LOANS-FARMLAND	0.02%	0.02%	0.03%	0.04%	0.22%
RCON1797	REVOLVING, OPEN-END LNS SECD BY 1-4F	0.27%	0.27%	0.41%	0.72%	1.60%
RCON5367	ALL OTH LNS SECD BY 1-4FMLY-1ST LIEN	0.05%	0.08%	0.12%	0.27%	0.55%
RCON5368	ALL OTH LNS SECD BY 1-4FMLY-JR LIENS	0.23%	0.42%	0.62%	1.55%	3.52%
RCON1460	R.E. LOANS MULTI-FAMILY	0.00%	0.00%	0.02%	0.07%	0.21%
RCONF160	LN SECURED BY OWNER OCCPD NONFARM NO	0.04%	0.06%	0.11%	0.22%	0.40%
RCONF161	LN SECURED BY OTHR NONFARM NONRES PR	0.00%	0.05%	0.05%	0.13%	0.41%
RCON1288	LOANS TO DI'S & ACCEPT OTHR	0.02%	0.00%	0.00%	-0.04%	0.02%
RCON1766	C&I LOANS	0.49%	0.24%	0.21%	0.27%	0.43%
RCON1590	LOANS TO FINANCE AGRICULTURAL PROD	0.24%	0.08%	0.04%	0.05%	0.21%
RCONB538	CREDIT CARDS LOANS	3.33%	2.33%	2.50%	2.70%	3.11%
RCONK137	AUTO LOANS	0.71%	0.45%	0.42%	0.39%	0.40%
RCONK207	OTHER LOANS TO INDIVIDUALS	0.94%	0.65%	0.80%	0.98%	1.26%
RCON2081	LNS TO FGN GOVTS & OFFICIAL INST	0.00%	0.00%	0.01%	0.20%	-0.01%
RCONJ464	OTHER LOANS	0.13%	0.13%	0.10%	0.09%	0.13%
RCON2165	LEASE FINANCING RECEIVABLES	0.26%	0.13%	0.09%	0.06%	0.20%
	Total	0.49%	0.35%	0.38%	0.52%	0.86%
	3 Year Average	0.41%				
	5 Year Average	0.52%				





# CECL Estimator Tool

- Utilizing call report data, you can obtain an estimate of the potential impact of the new standard
- Let's look at some examples



## CLA Dashboards

## About BankTrends



### [CECL Estimation Calculator](#)

- Quantify the financial statement impact of the new ALLL standard
- User inputs simulate allowance levels under CECL
- Estimation tool helps plan and prepare for implementation

[Tutorial Video](#)



### [Bank Scorecard](#)

- Performance scorecard report for a single bank
- Trends for performance, capital, loan quality and liquidity ratios
- National percentile ranking for each metric

[Tutorial Video](#)



### [Rankings Map](#)

- Sort bank map by profitability, growth, and other ratios
- Filter banks by state, region, or asset band
- Visualize and assess market trends

[Tutorial Video](#)



Tuesday, June 06, 2017

### **Q1 Call Report data loaded for all FDIC-insured institutions**

[Download complete list of banks](#)

### **Videos & FAQs**

[BankTrends Overview \(3 mins.\)](#)

[Ratio Definitions](#)

[Data FAQs](#)

[How to Make a Presentation](#)

[Snagit Screen Capture](#)

### **Other Items**

[Line Item Export](#)

[Blank Presentation Template \(PPT\)](#)

[Sample Board Report \(PDF\)](#)

[How can BankTrends help my bank?](#)

\$ 31,838

## Current ALLL

Allowance as of Mar-17 Call Report

\$ 6,425

## Projected CECL Impact

Allowance will increase under CECL

\$ 38,263

## Estimated ALLL

Estimated Allowance under CECL requirements

20 %

## Projected Increase to ALLL

Percent increase to current ALLL level

ALLL Estimate

Historical Comp.

User Inputs

Practical Guidance

 [EXPORT TO EXCEL](#)

	No. of Pools	Principal Balance	Expected Remaining Life (in Quarters)	Expected Lifetime Loss Rate	Qualitative Factors / Forecast	Expected Lifetime Loss	Calculated Loss
<b>Construction Loans</b>							
1-4 Family Residential Construction	40	71,307	4	0.04%	0.85%	0.89%	632
Commercial Construction, A&D, Land, Lots	41	171,252	4	0.07%	1.00%	1.07%	1,830
<b>Real Estate Loans</b>							
Farmland	25	161,980	20	0.12%	0.50%	0.62%	1,000
HELOCs	35	225	4	0.00%	0.55%	0.55%	1
1-4 Family 1st Lien	13	319,115	32	0.33%	0.65%	0.98%	3,118
1-4 Family 2nd Lien	33	2,674	12	0.54%	0.65%	1.19%	32
Multi-Family	25	128,661	20	0.00%	0.65%	0.65%	836
Owner Occupied Commercial	25	265,120	20	1.26%	0.50%	1.76%	4,662
Non-Owner Occupied Commercial	25	294,633	20	2.13%	0.50%	2.63%	7,754
<b>Commercial and Industrial Loans</b>							
C&I	41	456,342	4	0.47%	0.75%	1.22%	5,577
<b>Consumer Loans</b>							
Credit Card	0		4	0.00%	0.60%	0.60%	
Auto	24	21,722	16	0.88%	0.65%	1.53%	333
Other Consumer	33	18,788	12	1.49%	0.65%	2.14%	402
<b>Other Loans</b>							
To Depository Institutions	4	1,762	8	0.00%	0.75%	0.75%	13
Agricultural Production	37	243,635	8	1.05%	0.75%	1.80%	4,384
To Foreign Governments & Institutions	0		12	0.00%	0.75%	0.75%	
All Other	33	19,435	12	38.64%	0.75%	39.39%	7,655
Lease Financing Receivables	32	4,529	8	0.00%	0.75%	0.75%	34
		<b>2,181,180</b>					<b>38,263</b>

# SHARE SCREEN



# CECL Estimator Subscription

- Annual fee - \$5,500
- Includes 1-year subscription license to CECL Estimator, with call report information updated quarterly
- Includes 8 hours of CECL consulting from CLA in the preparation and implementation of CECL during the 1-year subscription



# Parting Thoughts

- Small banks do not need big models!
- Start researching which potential models will best fit your bank. Once you have an idea of what model you will use, begin thinking about the data you will need. It likely will not be as bad as you think.
- Consult with CLA to discuss any questions you may have surrounding CECL and utilize the CECL estimator as you begin the planning process.



# Questions?



# Thank you!

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