

# CECL FAQ

## Top CECL questions from banking professionals

Starting in December 2016, Sageworks CECL Methodology webinar series has been educating thousands of banking professionals about segmentation, life-of-loan application, methodology and forecasting as they apply to various loan portfolio types. Over this series, Sageworks has fielded and answered hundreds of individual questions asked during the sessions. Below is a compilation of the most frequently asked questions with answers provided by Neekis Hammond and Tim McPeak – risk management consultants with Sageworks.

### General

#### **Some claim CECL may drive an increase in reserves, as much as doubling, or more. Should banks and credit unions worry how their data will be incorporated into stress testing?**

The ABA have acknowledged this question and are in the works to start a conversation about how to incorporate that data into Stress Testing models.

#### **CECL is being delayed...?**

This is not true. There is no evidence to support this statement.

#### **New administration will abolish CECL with regulatory reform?**

This is not true. There is no evidence to support this statement.

#### **ABA advocating to delay implementation?**

This is not true. There is no evidence to support this statement.

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### Data

#### **How much historical data is required?**

At a minimum, if you are not going to do a Discounted Cash Flow (DFC) calculation, you need to have historical data covering the life of the asset. If you want less volatility and clarity into your forecast, you will want more data.

#### **How many historical periods do I need to include; do they need to be stored monthly, quarterly, or annually?**

Ideally, this data would be stored on a monthly basis for the life of the assets. For example, to calculate a 3-year loss experience and your implementation date as an SEC-filer is December 31, 2019 then you will need to have from the 12 previous quarters or from Q1 2017.

## We have call report data going back n years; do we have enough data?

Summing annual loss rates is punitive because you also have losses in the numerator of your calculations. Looking at just annual average loss data does not provide you with enough data to calculate a life-of-loan loss rate.

## We have loan number, balance, and loan term information stored; is this what you're referring to?

This might be sufficient for one method such as Vintage, but as the characteristics of your loan pools change so will your methodology and so will the data that is needed to calculate. In addition to loan number, balance and loan term, we encourage institutions to capture, as a point in time, the risk metrics associated to a loan and not just the loan informations itself.

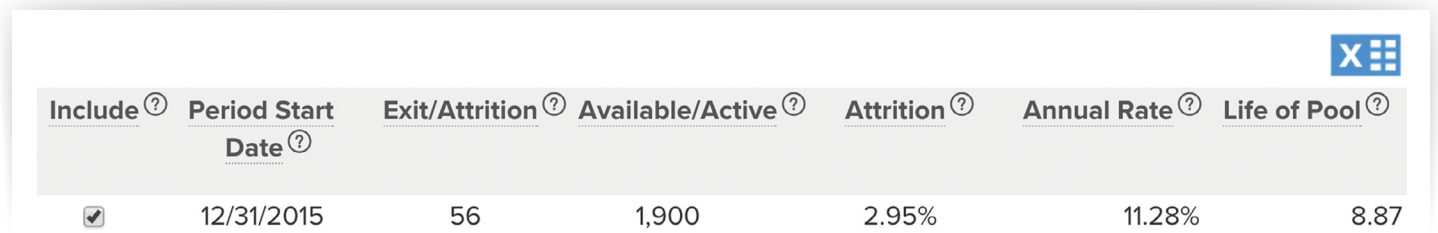
## We have origination information, loan number, loan balance, and loan-level charge-off data; what else are we missing?

Similar to the previous question, to retain flexibility, limit volatility and increase your understanding of the analysis, we suggest having the risk metrics to accompany the loan information.

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## Contractual Life

### How do you calculate the average life for the loan? Can you into more details on how it is related to attrition analysis?



| Include ?                           | Period Start Date ? | Exit/Attrition ? | Available/Active ? | Attrition ? | Annual Rate ? | Life of Pool ? |
|-------------------------------------|---------------------|------------------|--------------------|-------------|---------------|----------------|
| <input checked="" type="checkbox"/> | 12/31/2015          | 56               | 1,900              | 2.95%       | 11.28%        | 8.87           |

Figure 1

Taking Figure 1 as an example, this mortgage pool with 1900 loans has had a quarterly attrition # of 56 loans. To get the attrition rate of 2.95% you would take 56 and divide it by the total loans in the pool, 1900, which when annualized gives you 11.28% percentage, which is an effective interest calculation of that quarterly rate. It is okay to assume that this attrition rate is linear for your forecasting purposes, which when carried through gives you an average life of 8.87 years.

### Is attrition count based or dollar based?

You could argue this either way. At the end of the day we are trying to answer, what is the probability of these loans exiting, how many are exiting and at what pace?

In a sample of  $N$  equally likely outcomes mathematicians assign a chance (or weight) of  $1/N$  to each outcome

The probability of an event is defined as the number of certain outcomes divided by the total number of equally likely outcomes in the sample space of the experiment.

Using a dollar based approach implies an already determined (supportable) correlation to attrition rates.

- 11 Loans; 10 @ \$1, and 1 @ \$90. \$90 exits the portfolio over the analysis period. Should we then assume 9 of the remaining 10 loans will exit in the following quarter?
- If dollars are correlated to behavior, that implies a risk variance between loans within a pool that is, by definition, intended to contain loans with similar risk characteristics

### **When do we use a prepayment rate such as CPR and SMM and when do we use expected life?**

You would use a prepayment rate if you were using a discounted cashflow (DCF) approach. A prepayment would not be important when you use a Vintage or Migration approach and likewise an attrition number is less important for DCF.

### **How do you calculate the prepayment rate? Can you go into more detail on how it is calculated?**

A lot of banks do this internally and others contract it out as a part of their ALM process. A typical way to perform this is to look at your loan performance over a certain set of historical months and compare that loans performance to expected loss.

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## Segmentation

### **We presently segment our pooled loans by loan type (collateral) and then risk rating. Under CECL, would you anticipate segmenting by product type, then collateral type and then risk rating?**

There is no guidance or commentary that says you cannot approach segmentation this way. Usually, I encourage two levels of segmentation. So the principal would be to choose a type of loan and then sub-segment by a risk metric whether that is FICO for consumer pools, and risk rating in my commercial pools.

### **Can we simply break out our loan pools by call code?**

Absolutely. One of the benefits is that there is readily available annual loss data available by call code for peer and relational testing. The use case for those annual losses is pretty minimal for doing a CECL calculation. If you are using a DCF model that can then turn those annual losses into a lifetime calculation based on your institution's amortization schedule then segmenting by call code would be appropriate.

# Methodology

## VINTAGE

### **Do you need to have both the origination date and renewal date? Is it ok to replace the first origination date with the renewal date when it happens?**

Yes, you do need both the origination and renewal date. No, it is not okay to replace the first origination date with the renewal date when it happens. For example, if we originated a loan in 2012, it had a 3-year maturity and we renewed that credit in 2015. That loan would have a 2012 and 2015 Vintage. Any events that happened to that credit after the renewal should be tied to the 2015 Vintage and subsequently, any behavior before that renewal should be tied to the 2012 Vintage.

### **Regarding extensions/renewed loans, do you count the extended/renewed life as part of the life of the loan?**

ASU 326-20-6, 326-20-50-7, 310-20-35-9,10,11,12

In most cases, a renewal would result in a “new loan” for vintage or any life-of-loan analysis. The guidance contained within the new standard (ASU 326/CECL) points to a “more than minor” test contained within ASC 310-20: “This condition would be met if the new loan’s effective yield is at least equal to the effective yield for such loans and modifications of the original debt instrument are more than minor.”

In practice, more than minor has been determined to be >10% change in NPV. Also, short-term extensions that facilitate administrative needs are ignored and/or do not meet the “more than minor” test. For example, a 90-day extension would likely not constitute a new loan while a full 3-year renewal would.

## MIGRATION

### **What’s optimal for loss rate calculation? 36moths? Longer? Shorter?**

You need to run your average life calculations by pool and understand how your portfolio is performing. There is not a ubiquitous rule-of-thumb that would apply to all institutions. Each pool will have a different average life.

### **When we are talking about migration analysis, are we only concerned with the beginning credit quality indicator and how much of that pool moved to loss OR are we following the pool through all grade changes through the life of loan?**

Loss typically occurs when a credit goes to a specific risk-rating (i.e. Sub-standard); therefore, loss rates in every other risk-rating category except for that one would be zero. So the idea here is, we are freezing a loan with its attribute at that point in time and watching it perform into the future. The future behavior will be pulled backward to that loan’s risk-rating and balance at that point in time.

## PROBABILITY OF DEFAULT & LOSS GIVEN DEFAULT (PD/LGD)

### **We subscribe and/or calculate the probability of default at our institution. Can we use our current PD model?**

If you are using a 1-year PD model then you need to change it to the current life of the asset you are estimating losses on.

## DISCOUNTED CASH FLOW (DCF)

### We're approaching \$10B and are looking for a solution for DFAST and CECL. Which approach is ideal for cross application?

If we think about DFAST the principle is, at a point in time and with clarity. Not just losses, but growth and revenue. A DCF would provide the period level results that are needed and could be correlated to the FED tables to inform you DCF schedule.

### Our institution is only \$500M, we don't need to do complex modeling such as DCF, correct?

That can be true, if you do not have access to your historical data or if that data is not viable. Without viable data that's shows the life of the asset then a DCF model may be the most applicable approach and with the right tools it is not a cumbersome exercise.

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## Our Consultants



**Neekis Hammond**  
Senior Risk Management Consultant

As Principal Consultant with Sageworks, Neekis Hammond provides financial institutions with advisory services, leads thought leadership and consults with product development on compliance and accuracy. He specializes in the Allowance for Loan Lease Losses; CECL preparation and methodology; acquired loan accounting and valuation, Stress Testing, and various portfolio analysis topics. Prior to joining Sageworks, he held a key role within Elliott Davis Decosimo's FIG Consulting division where he provided valuation, accounting, and loan analysis services. Preceding Elliott Davis Decosimo, he was with a multi-billion dollar financial institution where he worked on acquisitions ranging in size from \$130 million to \$2 billion and was an auditor with a regional CPA firm.



**Tim McPeak**  
Executive Risk Management Consultant

Tim McPeak is an executive risk management consultant at Sageworks, where he advises on risk and portfolio management with financial institutions nationwide. Previous to his current position, Tim led Sageworks' strategic partnership program, through which the company partners with consulting, loan review, accounting, and other professional services firms. Before joining Sageworks in 2011, Tim spent several years as an associate with investment banking firm Babcock & Brown, focusing on commercial real estate and infrastructure finance. Tim began his career in retail and business banking with Key Bank of New York. He received his bachelor's degree from Wake Forest University.

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