Erik Soell: Good afternoon, everyone. Welcome. Thank you for joining the webinar this afternoon. This is Erik Soell, from the Fed. Today’s topic is “Practical Examples of How Smaller, Less Complex Community Banks Can Implement CECL.” You all will be hearing from representatives from the Fed, the FDIC, the CSBS, the FASB, and the SEC, and they are all very excited to be spending this time with you.

We have a lot to cover, so let me jump in here. We want you to have the best listening experience possible, so let me give you guys a few pointers. If you haven’t joined us through the webinar yet, go ahead and click on the link that you received after registering. That will get you into the webinar tool. For the best webinar experience, please use the FAQ document that you can find under the “Materials” button in the player page.

I do want to highlight just a few notes for you all. You can listen to the audio through your PC speakers or through the phone. So, if you choose the phone option, the slides won’t sync with the audio unless you adjust your settings, and I’m going to tell you how to adjust those settings right here. You can go to the gray gear that’s located at the upper right corner of the slide window just above the presentation. So, select that gear. You’ll see some options for the media chooser, and just choose the phone option. That will ensure that you hear the audio live as we’re presenting today. If you do listen to the webinar, that’s fine as well. There’s just a little bit of latency that happens when we do a lot of this heavy media over the phone lines or over the internet.

Also, if you want a PDF of today’s presentation, you can access that also in the “Materials” button, which you’ll see in the webinar player. So, let’s move to Slide 2. We do have a lot to cover. We plan to spend the first 75 minutes or so sharing a lot of information with you, and then the final 30 minutes we want to do Q&A. We know we’re not going to get to all of your questions, but let me share a couple of things, here.

The questions received ahead of time have been already keyed up in the presentation, and then we’re going to take the questions that you send in. Please note: Anything we don’t cover will be reviewed and organized and considered for future communications and any other outreach that we will, of course, be doing on CECL. I will say the team here has tried to address many of your questions in the prepared presentation. If you submitted a question ahead of time, look for the answer in the presentation. You might find it in there.

As I said, you can get the presentation slides in the materials button, and you can submit more questions in either the “Ask Question” button, or send us an e-mail at
rapid@stls.frb.org. A bunch of you have asked if we are recording this call. We do record all of these calls. We will archive it, and it will be available at the same length that you used today to access the webinar.

We are also going to have a transcript made, and we will make that available in the next couple of weeks. Real quick. A reminder, the opinions expressed in the presentations are statements of the speakers’ opinion and are intended only for informational purposes and are not formal opinions of nor binding on any of the agencies on today’s call. We have a lot of presenters today. So, before we go further, let’s do the introductions on Slide 3, and Joanne Wakim, I’m going to turn it over to you.

**Joanne Wakim:** Great. Thank you, Erik. So, yes, welcome. Let me also welcome and thank you for joining us today, and my name is Joanne Wakim, and I’m the Chief Accountant at the Federal Reserve. As Erik mentioned, we’re very excited, and we have quite a few presenters, so let’s do introductions. You will find all of our names on Slide 3. Again, my name is Joanne Wakim, Federal Reserve.

**Sarah Chae:** This is Sarah Chae [phonetic 00:03:33] from the Federal Reserve.

**Bob Storch:** Hi. This is Bob Storch from the Federal Deposit Insurance Corporation (FDIC).

**John Rieger:** This is John Rieger from the FDIC.

**Kyle Thomas:** This is Kyle Thomas, with the Conference of State Bank Supervisors (CSBS).

**Shayne Kuhaneck:** This is Shayne Kuhaneck, from the Financial Accounting Standards Board (FASB).

**Sagar Teotia:** Sagar Teotia, from the Securities and Exchange Commission (SEC).

**Joanne Wakim:** Great. We’re just real excited to all be here together with you during this session today. This session is geared for smaller and less complex community banks. It’s possible that some of the concepts may apply to larger institutions. In fact, we have some larger banking organizations that have signed up, and we know are on the call today, so we’re glad you’re listening in.

Our main focus is going to be to speak directly to smaller, less complex community banks. We have a couple of overarching goals. One is that we want to provide you with education and information that will help you move forward in your implementation of CECL in 2018. We’ve heard some community banks say that you’re not sure how to get started, so we’ve geared this information in the webinar to help you with just that.
Another overarching goal is to dispel myths. We’ve heard some of you say that you believe that complex modeling techniques are required, or you’ve heard from others that complex modeling techniques are required to calculate the allowance under CECL. And our message has consistently been that CECL is scalable. The standard is flexible, and for smaller, less complex community banks complex modeling techniques are not required.

So, to reiterate that right now. Again, for smaller, less complex community banks, complex modeling techniques are not required, and simple practical methods should work. The allowance under CECL for most smaller, less complex community banks can be calculated in a spreadsheet. Please note that I’m not talking about housing your loan data. I’m not talking about housing loan level data and maintaining it overtime in a spreadsheet, I’m just talking about the calculation itself.

So, you can choose as an institution. You can choose to use a more complex modeling technique, or you can purchase a vendor solution. You can do whatever you see fit for your institution, and the agencies are not going to require that you do something else, but we do want to just provide information to you more broadly. And then, on this particular point, that for most smaller, less complex community banks, spreadsheet-based calculations should work.

We hope that this webinar will emphasize and amplify that message. So, let’s move to Slide 4. On Slide 4, you’ll see more detailed goals. During the session, we will walk through several practical spreadsheet-based loss rate methods that are compliant with CECL and may be appropriate as a basis for your institution’s ALLL, and I say, “may.”

As I noted a moment ago, the goal of the session is to provide you with education and information to help you determine which method or methods are best for you. So, we’re presenting a range of methods that might be appropriate, but then you’re going to have to sit down with your management team and decide which method is the most appropriate for you considering your own facts and circumstances.

We’ve encouraged you to invite your auditors to listen in as well, and so we hope that this information generates a robust conversation between you and your auditor on the method that is the most appropriate for you. Related to this, we’re not signing off. We’re presenting this information, but it shouldn’t be perceived as a signoff that if anybody uses any of these three methods, it’s always going to work in any and all situations. You need to evaluate and identify the method.

It’s possible an examiner may come in and challenge you on the method you selected. And then again, when we talk about using a spreadsheet for CECL, we’re not talking about housing your loan data on a spreadsheet. My personal view is it’s not practical for most institutions to house all of their loan level data and maintain it over time in a spreadsheet due to the volume of data and then just the challenge as it relates to internal controls and the risk of error.
Secondly, as a goal, our method is to really address the starting point for the CECL estimation. So, estimating the allowance is a multistep process. Once you identify the method, you’re then going to have to think about data, segmentation, qualitative factors, and other issues that come into play as you complete your estimate. So, we are not covering the entire estimate here. We’re going to illustrate several methods that we think will be helpful to you to go from theory to application.

I know, for me, walking through the examples was very helpful as a practical matter. So, you’re going to listen to us for about 90 minutes. And really, no human being can take that all in in one setting with the exception of maybe Bob Storch. But other than that, most of us can’t do that, I know, for myself. So, when my team walked through the examples with me, I had to pause them at various points, so I could digest what they said.

I had the opportunity to ask questions when something wasn’t clear, and you’re not going to have the opportunity to do that today. So, I want you to have the expectation going into this next amount of time that we’re spending together that you won’t catch everything, and so you’re going to need to re-watch the session, maybe each time focusing on a different method. And then I guarantee you at about 40 to 45 minutes in, you’re going to check your watch and think, “When is this ever going to end,” as concentration fatigue really sets in, and so it’s just hard to kind of keep your concentration going.

So, as Erik mentioned, we’re recording the session, and you can watch a recording of it shortly after its put online, and then they’ll be a transcript, so you don’t have to focus on taking notes. You can focus on the presentation. So, as it relates to the presentation, last, but not least, one of our goals is to provide high level observations on data, process, and controls. So, let’s move to Slide 5, and I’m going to hand it over to Bob.

**Bob Storch:** Thank you. Good afternoon, or good morning, depending on your time zone. As Joanne said, my name is Bob Storch. I’m Chief Accountant in the FDIC’s Division of Risk Management Supervision. Let me add my welcome to Joanne’s and thank you for joining us for today’s webinar. I would like to supplement Joanne’s remarks about scalability and loss estimation methods.

The FASB’s CECL accounting standard is principles-based and thereby provides flexibility to ensure that the new credit loss methodology will be operational for all institutions regardless of size and resources. The standard does not specify a single method for measuring expected credit losses. Instead, any reasonable approach is allowed, as long as the estimate of expected credit losses achieves the objective of the FASB’s new CECL methodology.

Under the standard, the allowance for credit losses is a valuation account measured as the difference between financial assets’ amortized cost basis and the amount expected to be collected on the financial assets, what we commonly refer to as “Lifetime Expected Credit Losses.” The standard was designed to allow institutions to apply expected credit loss
estimation approaches that build on existing credit risk management systems and processes, as well as existing methods for estimating credit losses.

As the agencies noted in their Frequently Asked Questions on the new credit losses accounting standard, which were most recently updated in September 2017, under today’s incurred loss methodology, institutions use various methods, including historical loss rate methods, roll rate methods, and discounted cash flow methods, to estimate credit losses. CECL allows the continued use of these types of methods and other speakers will walk you through three examples of practical loss rate methods that the managements of smaller, less complex community institutions may find appropriate for their institutions.

However, it’s important to emphasize that institutions that today use what may be referred to as “Loss Rate Methods” under the incurred loss methodology cannot simply continue applying their existing methods and arrive at allowance estimates that achieve the object of CECL. There’s not a simple numerical formula that will allow institutions to convert their incurred loss estimates calculated under existing methods into a CECL-compliant credit loss estimate. Rather, as you will see in the next few slides, institutions will need to change certain key inputs compared to those used today in loss rate methods to properly implement the CECL methodology and achieve an estimate of lifetime expected credit losses.

As Joanne mentioned, the method or methods that an institution selects for estimating credit loss allowances is just the starting point. So as not to unduly lengthen the webinar, we will not be covering other aspects of the CECL estimation process, such as segmentation of the loan portfolio, qualitative adjustments, including those based on reasonable and supportable forecasts, and how institutions may maintain and manage loan data relevant to estimating credit losses over time. Those are very important CECL implementation issues, but we won’t be covering them today.

In addition, neither community institutions nor our examiners should treat the illustrations used in our loss rate method examples as a simple template for implementing CECL. Each institution’s management is responsible for assessing possible CECL estimation methods and supporting the measurement method or methods they select. Furthermore, the loss rate methods illustrated in today’s webinar are not an all-inclusive set of methods. Our purpose is to illustrate some of the acceptable alternatives available to smaller, less complex institutions that, when properly implemented, would be acceptable methods for calculating allowances under CECL.

Earlier, I referred to the agency’s Frequently Asked Questions, or “FAQs,” on the new credit losses accounting standard. Slide 50 identifies and provides links to various CECL-related resources, including the interagency FAQs. In addition, in case you hear us using acronyms that you are not familiar with during today’s webinar, if you printed out the slides, you’ll find Slide 51 provides a list of relevant acronyms and what they mean. With all that as background, let me turn the program over to Sarah Chae.
Sarah Chae: Thanks, Bob. As Bob said, this is Sarah Chae from the Federal Reserve, and I will be covering the examples portion of today’s webinar, along with John Rieger, from the FDIC. Now, you’re going to be hearing my voice for the next 40 minutes or so. So, please get comfortable with my voice and, hopefully, you won’t get the fatigue that Joanne mentioned too early on.

Before we jump into our main event of the loss rate examples, we thought it would be helpful to do a high-level overview of the loss rate method concept. Turn to Slide 7. On here, we have a simple formula for how today’s incurred loss allowance is calculated. You first start off with your unadjusted historical charge-off experience often referred to as the annual loss rate or your charge-off rate. Then, you add your qualitative adjustments, and the sum of these two are then multiplied by your loss emergence period and then again by the loan category balance, which is your ending balance of the loan.

Now, this equation results in today’s FAS 5 number, or ASC 450. Now, we’re aware that most community banks don’t explicitly use a loss emergence period, but rather simply use the annual charge-off rate. Now, if the concept of the loss emergence period is new to you and you would like to find out more about that, please refer to the 2006 interagency policy statement on the allowance.

It doesn’t specifically use the term “loss emergence period,” but it does give you some background as to situations where your loss amount may be greater than 12 months. Turn to Slide 8. Now, let’s see how we can change today’s allowance formula to tomorrow’s CECL formula. Now, your first step is to eliminate the loss emergence period; the big red X that you see on the slide.

Now, since CECL requires lifetime losses, the loss emergence period would not be applicable anymore. As mentioned in the earlier slide, I understand that the vast majority of community banks just use one year as the default loss emergence period, so this may not be applicable to many of your institutions. Turn to Slide 9, please. Following the same logic, next, we convert the annual unadjusted historical charge-off experience to a lifetime experience.

I wanted to pause here to emphasize that going from an annual loss experience to a lifetime loss experience is one of the fundamental changes between the incurred and CECL models, and we will be spending a bulk of our webinar today on that particular point. Now, here is a very simple illustration of moving from annual to a lifetime. Let’s say you have a commercial loan with a contractual life of three years with an option to renew. Naturally, your annual charge-off would be based on one year, and your lifetime would be based on three years.

On Slide 10. Finally, in addition to making current condition adjustments, we add additional adjustments for reasonable and supportable forecasts under CECL. In other words, your qualitative adjustments under CECL represents both the current conditions, as
well as your reasonable and supportable forecast adjustments. These changes are definitely meaningful and can be complicated when you dive into all the details. It’s always helpful to put things into perspective of what’s really conceptually changing. I hope this diagram really gives you a good overview.

I would like to emphasize that our examples today will solely focus on the yellow circle that says, “Lifetime Unadjusted Historical Charge-off Experience.” In other words, how to utilize your annual charge-off rates to derive a lifetime charge-off rate. We believe this is a key starting point of the CECL calculation and can be derived using the historical data. Now, because we will focus on the yellow circled portion of the entire calculation you see here, we are referring to our session as covering just the starting point of your CECL estimates.

Turn to Slide 11. On a related note. I think it would be prudent to also emphasize what we will not be discussing today. Bob has covered this at a high level, but this diagram probably gives you a better perspective. We will not be discussing how to derive and support your qualitative adjustments. We all know that this webinar could be an all-day event if we just add the qualitative adjustments into the conversation, and I think as Joanne mentioned, this webinar is probably a little bit too long to begin with.

We have issued an FAQ back in September 2017, regarding the applicability of qualitative adjustments. In particular, it was Question 24, and we do plan to issue additional FAQs and interagency guidance in the future on this point. It just will not be the focus of today. This is probably stating the obvious, but I think it’s important to say this out loud. Although, we won’t be focusing on the qualitative adjustments today, your CECL allowance will not be complete without it, so we are in no way deemphasizing the importance of this.

For our webinar, we have just chosen to start with the first box of this equation to get the conversation started with you about the first steps on your CECL journey. Turn to Slide 12. Now, here is a quick refresher on how the annual charge-off rates are calculated today. This information should be familiar to most of you, if not all. Column C is the last column. It’s the annual charge-off rate. Now, this Column C is calculated by taking your Column B, which contains your annual charge-off dollars and dividing that by the average balance in Column A.

Now, I understand that some of the situations may use the ending amortized cost balance to calculate the annual charge-off rates today, so there may be some variation in practice today. Turn to Slide 13. Now, this is the last slide before the main event of the examples and a very important warning slide for us. Before we begin the examples, we would like to highlight and emphasize some key reminders for you to keep in mind. We believe these reminders are extremely important to ensure our message is not taken out of context, so we will be intermittently showing this warning sign throughout this presentation.
To start, all loss rate methods shown today illustrate a starting point. Management must make necessary adjustments and holistically evaluate the overall results to determine your final allowance for credit losses. It is not a complete list of your loss rate methods and certainly is not a regulated preferred or a safe-harbor list of CECL methods. Now, this bears repeating. This is not a list of safe-harbor methods that you can choose and ensure that you’re going to get no questions from your examiners or auditors.

Institutions may also choose non-loss rate methods, the methods that Bob mentioned earlier such as PD, LGD, your roll rate analysis and discounted cash flow. The last point here is very important. There’s no one method that is appropriate for every portfolio at all times, so you have to make sure that you pick the methods that are most appropriate to your institution and to your facts and circumstances. The bottom line here is that our webinar today does not set any kind of regulatory policy.

Now, we have heard many people say that education and information and how to connect today’s loss rate based method to CECL’s loss rate based method would be a very helpful tool for many institutions, and that is our goal, to provide education and information that you can use in your internal conversations with your members of your team, as well as your auditors and members from our exam staff, as well. With that, I’ll hand this over to Shayne for some perspectives from the FASB.

Shayne Kuhaneck: Thanks, Sarah. My name is Shayne Kuhaneck, and I am the Assistant Director of Technical Activities at the FASB, and I focus on implementation efforts, particularly with regard to CECL. First, I would like to thank the other presenters and the agencies for allowing the FASB to participate in this event. We think opportunities like this to provide education on the new credit losses standard is an important step and a smooth transition to the new requirements.

I would echo the comments made here with respect to this being a starting point and the need for a holistic approach. I, too, would also emphasize that this should not be taken as a complete list of methods and note that the standard was intentionally written to provide institutions with the flexibility for determining how to calculate their loss reserves. With that, I’ll turn it back over to Sarah, and I’m really looking forward to the examples.

Sarah Chae: Thanks, Shayne. Remember, Shayne is here, and you can still submit questions, and he has promised that he is going to answer every single technical question that comes in.

Shayne Kuhaneck: Well, close to all of them.

Sarah Chae: He did say that we can send it to him afterwards, because we probably won’t have time to get to all of them, but please do remember, he’s here, and ask your technical questions. So, let’s start with Slide 14. The first method we will be going over
today is what we refer to as the “snapshot method.” It’s also commonly referred to as the “open pool method.” Next, please.

On Slide 15, just like the name, this method takes a snapshot of a portfolio at a certain point in time and then tracks the loan portfolio’s performance in the subsequent periods until its ultimate disposition. Let me pause here and note that we will be repeating some of the key points throughout our examples. I personally get lost listening to webinars with too many new concepts and numbers, so I appreciate some repetition. I’m hoping that many of you can relate to this and also appreciate our repetition.

I will also remind you that we are recording this webinar, so you can go back and replay it as many times as you can stand my voice. Let’s get back to the snapshot method. Again, this method takes a snapshot of a loan portfolio on a specific date and then tracks all charge-offs that occurred after the specific date from this pool. For example, if the snapshot date is “as of December 31, 2015,” will track all losses that occurred in 2016, to the final year this pool pays off. We’ll aggregate all charge-offs that occurred in subsequent periods to derive an unadjusted lifetime historical charge-off rate.

We have a formula shown here where the numerator is your aggregate sum of all charge-offs that occurred in the subsequent period, while the denominator is the loan portfolio’s outstanding balance on a snapshot date. In the same example, the numerator will be your charge-off experience in 2016, to the final year the pool pays off, and the denominator will be your December 31, 2015, outstanding loan balance.

John Rieger: So, in other words, this method will calculate the loss experience from the snapshot date rather than from the loan origination date. Can you explain to the listeners why that works conceptually as a starting point for a lifetime estimate?

Sarah Chae: Well, what this method is doing is trying to calculate a lifetime loss rate for your pool and aggregate, your current pool that is, which is made up of different loans of different ages rather than trying to calculate a lifetime loss rate for each vintage within your pool. This method estimates an average lifetime loss rate for your current pool today by tracking the lifetime loss history of earlier comparable pool.

From that history, you can select an average lifetime loss rate for your current open pool. Then, you can apply your qualitative adjustments to adjust for the differences in those pools and for the economy on hand. For this particular method, you can start tracking your historical data at an aggregate pool level at any point in time, rather than based upon the loan’s origination date, which is what you would have to do under the vintage method, and we will be covering that method later on today.

John Rieger: Sarah, can you take a minute to discuss how this method stacks up to the vintage method? When should I choose it?
Sarah Chae: Well, it’s considered an alternative to your vintage method, but not necessarily an easier one since you have to maintain data over the course of a long period of time that is. It’s just that you have fewer data points to maintain than the vintage method, which requires that you track by the year of origination. Here, we’re just tracking data at the aggregate pool level at any given point in time.

Please note that this method aligns with the method we most often see in our outreach with the auditors and vendors, and they often refer to this as the “open pool” method. We found the term “open pool” somewhat confusing, so we decided to add “snapshot” to the name. Now, let’s go through an example to illustrate this method more in detail in the next slide. So, on Slide 16, let’s go over the fact pattern that we’ll be using in our example.

We will be calculating the allowance for credit losses on a commercial real estate portfolio as of December 31, 2020, not 2018, but 2020. Now, we’re using 2020, because this is the first mandatorily effective date for CECL, although it may not be the effective date for many of the listeners. The CRE portfolio has an outstanding balance of $10,000,000, as of December 31, 2020, and the average life of this portfolio is five years. It’s important to note here that the average life of five years here represents your CECL definition of lifetime, which is the contractual term adjusted by prepayments and reasonably expected troubled debt restructuring.

Your expected renewal and non-troubled debt restructuring modifications are not incorporated in the CECL definition of contractual life. In our example, the $10,000,000 outstanding balance, is a pool of loans based on similar credit risk characteristics as defined in the accounting standard. Now, we have previously communicated in an interagency FAQs, that institutions may conclude that their existing segmentation under the incurred model such as your Call Report class code may still be appropriate under CECL.

For example, this pool of $10,000,000 could represent Call Report Schedule RC-C’s loans secured by nonfarm nonresidential properties. Now, banks may decide that it’s appropriate to further disaggregate this Call Report category. For our examples today, we assume that this $10,000,000 of CRE portfolio’s credit risk characteristics stay constant throughout its life. Lastly, in our fact pattern, management expects a decline in real estate values and a rise in your unemployment rate for 2021 and 2022. Management cannot reasonably forecast beyond this two-year period. Now, please note, that this does not suggest that the two years is what we would expect from all institutions. Naturally, there is going to be judgment applied.

For today’s examples, we will simply assume 25 basis points of qualitative adjustments for these factors. Again, we will not be going over how we arrive at these 25 basis points as this is not the focal point of today’s webinar. The fact patterns laid out here
on this slide will be consistently used for all three of our examples today, and we used the similar data to calculate all three examples today, as well. Next slide, please.

So, on Slide 17, let’s get going with some numbers here. On this slide, let’s start by focusing on the yellow box highlighted in the first two columns. The dates in Column 1 is the year end. In Column 2, you will find the amortized cost information for this CRE pool at year end. The balance is changing over time, which tells you that at times, while some loans are rolling off, the originations occurring at greater numbers and sometimes fewer originations are occurring as well.

Now, we assume that an institution only has CRE historical pool data back to 2015, and no earlier. The outstanding CRE loan pool balance as of December 31, 2015, is $9,350,000. As I noted, in the chart, you see the ending amortized cost of the CRE pool at 2015, all the way to 2020. You could choose any of these years for your snapshot pool, but for various reasons let’s say you decide to go with 2015. Now, with the one very obvious reason for us today in this overly simplified example is that 2015 is the only year I have available that gives me my full five-year average life data.

Next slide. We’re on Slide 18 now. Here, I have X’ed out all other dates and just circled my snapshot balance of $9,350,000, as of my snapshot date of 12/31/2015. Under the snapshot method, we will track the charge-offs from this portfolio balance until it has fully paid off in 2020.

**John Rieger**: In other words, December 31, 2015, will be our snapshot date, and the outstanding balance of $9,350,000, will be our snapshot pool balance.

**Sarah Chae**: That’s right. But we want to know what the losses are on the pool after the snapshot date. As you will see in the last column titled “Charge-offs Associated with Loans Outstanding,” at 12/31/2015, we have data points that show a charge-off of $32,000 in the year 2016. Another $32,000 in 2017, and $14,000 in the year 2018, and so on. Now, as indicated earlier, the snapshot balance fully paid off in the year 2020. Now, this means the total losses from the 2015 snapshot pool is $88,000, which is the sum of the last column you see here.

**John Rieger**: Okay. I’m going to repeat that just to make sure it’s clear. The $88,000 is the sum of all losses that happened during 2016 to 2020 that relate just to the snapshot balance, and you have that information because you specifically tracked charge-offs related to the 2015 pool until the pool is paid off or sold.

**Sarah Chae**: That is correct. It’s showing in the middle of the table here, we’ll divide the cumulative loss amount of $88,000, by your snapshot pool balance of $9,350,000, which computes to your 94 basis points.
John Rieger: So, it’s good to point out here that the 94 basis points is just your unadjusted historical lifetime loss rate. In other words, you still need to apply your qualitative adjustments.

Sarah Chae: Yes. In order to have a holistic allowance for credit loss calculations, it is equally important for management to come up with well supported qualitative adjustments. Again, qualitative adjustments now include both your current and forecast adjustments. In our example, we will simply apply 25 basis points based on the fact patterns we have given, and we’ll assume that it’s well supported and documented. So, we simply add your 25 basis points to the unadjusted historical lifetime loss rate of 94 basis points, which gets us to your total allowance for credit losses of 1.19 percent, or $119,000.

John Rieger: So, in 2015, if I had perfect foresight, I would have estimated 94 basis points as my lifetime loss rate.

Sarah Chae: That is correct. Ninety-four points will be your starting point before any qualitative adjustments, your current and forecast adjustments. I would like to make a point here. Using 2015 as our snapshot pool as a judgment because we are making the assumption that 2015’s portfolio is similar to our current portfolio. I would like to emphasize that management really needs to understand their historical loan data and how it compares to today’s portfolio and its current loss trends.

John Rieger: Another way of thinking about this is that the 2015 snapshot pool balance would comprise of loans originated in 2015 and prior. Therefore, you are using data related to loans that were originated five or more years ago. It is important to note here that the snapshot calculations can be done over multiple snapshot portfolios, for example, the snapshot or open pool that existed at 2016, 2017, and 2018.

Sarah Chae: That’s a great reminder. And once you have loss data from multiple snapshots or similar portfolios, institutions may decide to use their loss rate from various snapshot dates to calculate the allowance for credit losses. Just remember, the closer your snapshot date is to your current portfolio, you’ll have less of a burden when it comes to qualitative factors. Now, that sums up the snapshot pool method, and we will be moving onto the remaining life method.

Let’s actually turn to Slide 20 to get this started. Now, I have to say this is probably the toughest of the three for me to explain, but let’s get started, and I’ll give it a shot to see if you guys can all follow me. The remaining life method may look the closest to the traditional loss rate method that many community banks are familiar with today with definitely some twists and turns. The remaining life method utilizes your average annual charge-off rates and a pool’s remaining life to estimate your allowance for credit losses.

For amortizing assets, remaining life is calculated by taking the contractual life adjusted by your expected scheduled payments as well as your prepayments. The average
annual charge-off rate, which is calculated using the same process as today’s incurred loss method is applied to the amortization adjusted remaining life to determine your unadjusted lifetime historical charge-off rate. We laid out a simple formula on this slide to summarize. You start with your average annual charge-off rates. Again, this is calculated using the incurred loss approach today, multiply that by your amortization adjusted remaining life and that gets you to your lifetime historical charge-off rate.

Now, without further ado, let’s dive into the example on Slide 21. So, on this slide, we layout the same fact pattern that we used for the prior example. I’ll go through this pretty quickly. We’re calculating the allowance for credit losses as of 12/31/2020. It’s a pool of CRE loans with similar credit risk characteristics with an amortized cost balance of $10,000,000, and an average life of five years.

Your current and forecast adjustments of 25 basis points is a given. Now, we will show you two different ways to calculate using this remaining life method that results in identical allowance for credit losses in the following slides. Slide 22. Now, on this slide, we calculate the first part of the equation which is your average annual charge-off rate. Please note that the table shown here is a repeat of the incurred loss review that we did back in Slide 12.

The only difference here is the red bolded number at the bottom of the chart that says “36 Basis Points.” It’s simply an average of five years worth of annual charge-offs right above that number. Please remember, the historical time period used to determine your average annual charge-off rate is also a judgment that needs to be thoughtfully decided and properly supported and documented. Your overall qualitative adjustments may be less if you select the period that best represents your current portfolio.

Now, let’s keep that 36 basis points in back of our heads and move on to the next slide. In Slide 23, as we mentioned before, we decided to show you our step two in two different ways that gets you to the same answer at the end. On this slide, we show our option one. Now, here, you may be looking for an example that fits into the formula we showed a couple of slides back. However, note that this particular option doesn’t exactly follow the overall formula for the remaining life method.

I thought it would be good to start with this option as it was an easier one for me to explain. Hopefully, you’ll understand why after we go through everything. Let’s get right into the numbers. Now, the first column starts with your current period, 2020 amortized cost of the CRE pool and then projects out the pool balance over the next five years out to 2025. In the second column titled, “Estimated Paydown,” that represents your expected payments in the future periods until the pool is expected to fully pay off.

You will need to estimate the future paydowns, which includes your scheduled payments, as well as your prepayments to help determine your remaining life to be used in this calculation. Now, note that you would not include the expected credit losses in this
particular column. Calculating the estimated paydown is probably the most difficult component of the calculation. At your banks, you probably can obtain this number in many different ways, perhaps through your loan system or an approximation from the asset and liability management process.

You should identify the best, most supportable way to estimate this and then document it for your examiners and auditors. Once you determine the paydown amount, the rest is just math. In the third column titled, “Projected Amortized Cost,” you start with your $10,000,000 of outstanding balance as of your balance sheet date of 12/31/2020, and then you subtract your projected paydowns from the estimated paydowns column to estimate your future projected amortized cost for the next five years of the pool’s life.

John Rieger: Okay. Let’s stop here and try to summarize this chart in simpler terms. The first column starts with the balance sheet date. You’re calculating the allowance for credit losses, in this case, 12/31/2020. Then, it goes out to 2025, which is the time you anticipate the pool will be paid off. The second column is your estimated paydowns, which is your biggest assumption here, and it would include both the scheduled payments, as well as expected prepayment.

The third column is your projected ending balances at the end of each of those projected years, which is simple math of taking prior year’s amortized cost balance minus Column 2’s paydown. For example, a starting point of $10,000,000, minus paydown of $3,849,000, gets you to 2021’s projected balance of $6,151,000.

Sarah Chae: Thanks for that summary, John. We then take each of those future year’s projected amortized cost and simply multiple it by the average annual charge-off rate. You are essentially calculating each of future five year’s losses and aggregating it to get to your lifetime cumulative losses. For instance, in the first year, $10,000,000 of your outstanding balance is multiplied by your average annual charge-off rate of 36 basis points to get to your first year’s credit losses of $36,000.

John Rieger: Sarah, can you pause here to clarify if your $36,000 is the exact amount you expect to lose in year 2021?

Sarah Chae: Not exactly. We have to always remember that we’re using an average annual loss rate without adjusting for qualitative factors. So, it wouldn’t be the exact number you would expect. Now, moving on to the second year, which is 2022, $6,151,000, which is your ending balance as of 2021, and your beginning balance as of 2022 is multiplied by your average annual charge-off rate of 36 basis points to calculate the second year’s credit losses of $22,000. Now, you sum up the last column, and it gets you to your total lifetime expected credit losses of $80,000.

The bottom portion of the calculation is pretty straight forward. You can convert your $80,000 of your expected losses into a rate by dividing your $80,000 by amortized costs
of $10,000,000, and then you add 25 basis points of adjustments as an assumption that we provided earlier to arrive at your allowance for credit losses rate of 105 basis points. You then multiply your 105 basis points by $10,000,000 to arrive at the total allowance for credit losses of $105,000. Not too bad; right?

John Rieger: Agreed. Not too bad. It may not be easy to get the right data to calculate the estimated paydowns and support the qualitative adjustments, but I can get my arms around what you are doing here. Let’s see how option two compares.

Sarah Chae: So, on Slide 24, if you can advance to that. We show you your option two. Again, your option two arrives at the same amount as your option one, but in a different way. All right. Let’s get the easy part out first. The first three columns labeled, “Year, Paydown, and Projected Amortized Cost,” are identical to the calculation option number one. What is changing is the last column boxed out in yellow to calculate your 2.22 years, a weighted average amortization adjusted remaining life.

This column titled “Remaining Life” is a bit tricky to explain and to follow. At a high level, it simply represents the time period the projected amortized cost will remain outstanding as of year 2020. For example, let’s simply assume that all paydowns come in at the last day of the year. In our example, the numbers shown in the estimated paydown column will be coming in on December 31st of every year. Now, that means every single dollar of my 12/31/2020’s outstanding amount of $10,000,000, will only have a life of one year, and some of it will be paid down at the end of the year.

Therefore, your remaining life of your $10,000,000 is one year. Now, let’s apply the same logic to the projected amortized cost balance in year 2021. Every single dollar of 2021’s ending balance of $6,151,000 will have a life of two years as of 2020. Your first year’s expected paydown of $3,849,000 only had one year of life and that amount has been subtracted out of your $10,000,000 to arrive at your $6,151,000, and that $6,151,000 will be outstanding for one additional year of 2021. Now, this $6,151,000, was outstanding in the year 2020, and it will continue to be outstanding in the year 2021. So, the remaining life of this $6,151,000, as of our balance sheet date of 12/31/2020, equals two years.

John Rieger: Okay. I think this is a little confusing and warrants a pause to reexplain here. When Sarah first walked through this example, I thought that it’s almost counterintuitive to what you would first think. My first reaction would be to say, “Wouldn’t 2020’s amortized cost balance be outstanding for five years?” Then, I had to remind myself that this column represents the number of years the entire projected amortization cost will be outstanding over the next five years. I agree with you, but it’s a little tricky.

Sarah Chae: Now, you can see why we start with option one instead of this one. Once you have the top part of the chart done, you use all those numbers to calculate your weighted average amortization adjusted remaining life of 2.22 years. Now, for all of you out there who are like me and love to see all the formulas behind the calculation, we did insert a
slide right behind here to walk you through how you can calculate 2.22 years. But in the interest of time, we won’t cover that in detail, but please feel free to play with the numbers after the webinar, and you can check my math.

The rest of the slide is very straightforward. You take your 2.22 years we just calculated and multiple it by the average annual charge-off rate of 36 basis points, the number you tucked away in your head from a few slides ago. A combination of those two gets you to your 80 basis points. Now, add your 25 basis points of qualitative adjustments we have provided to get to your allowance for credit losses rate of 105 basis points. You then multiply your 105 basis points by $10,000,000 of outstanding balance to arrive at the total allowance for credit losses of $95,000.

John Rieger: Sarah, I have to say I like your option one much better. It’s easier for me to think through and set up in my process.

Sarah Chae: This is why we decided to show it in two different ways. I personally prefer option number two. Now, the good thing is that either way you get to the same answer, so the listeners can decide which way they prefer to go, and I bet you there’s other mathematical ways to do the same calculation as well. Next slide, please. Now, on Slide 25, as I promised, shows you the formula and how you get to the 2.22 years. I won’t be spending time on this slide, but please feel free to take a look after the webinar.

I’ve gotten two down, and the last one to go starting on Slide 26. That was a lot to say for me, which probably means there was a lot for you to digest, but just bear with me in this last example, and let’s power through. The last example we’ll go over is your vintage method. Now, some of you may already be familiar with this vintage method as we held an Ask the Fed session back in 2015 going over this method. In fact, FASB also held a webcast describing this method as well. Next slide, please.

On Slide 27, the word “vintage” refers to the loan origination period. A vintage analysis evaluates the loan’s performance since the origination date. Now, this is done by aggregating all loans originated in the same vintage year and tracking all the net charge-offs that occurred since the origination date. A vintage loan generally works well with loan products that have predictive behavioral patterns such as consumer loans. Borrower’s historical charge-off pattern is used to estimate your future losses. The formula you see on this slide is total charge-offs related to the vintage year, divided by the vintage year’s origination amount.

John Rieger: Sarah, can you explain why you compare charge-offs to the origination amount and not to the current outstanding balances?

Sarah Chae: Sure. Well, you want to compare your charge-offs to the origination amount in order to compute your lifetime losses instead of your periodic losses. Let’s go to the next slide and start walking through an example. On Slide 28, we have the same fact
Ask the Regulators
CECL Webinar for Bankers: Practical Examples of How Smaller, Less Complex Community Banks Can Implement CECL (February 27, 2018)

pattern we used in the prior two examples, so I won’t go through that in detail. Next slide, please. On Slide 29, we start to show the first step, which is to compile and organize your historical loan charge-off data.

The first two columns in this table represents your origination amount and date. In our particular example, we are showing the origination date by years. The columns in the middle represent the time period since the origination date and the charge-offs in those time periods. Period one represents one year since origination. Period two represents two years since the origination, and so forth. In other words, you first gather all charge-off history related to vintage year and then organize the information into the right periods shown on the slide.

John Rieger: For example, we will gather all charge-offs related to 2015 vintage year. Then, we will take any charge-offs that occurred in 2016 and report them under period one. Charge-offs occurring in 2017 will be reported under period two, and so on.

Sarah Chae: That’s right. You capture all charge-off information in each period until that particular vintage year has paid off. Now, the gray shaded boxes represent the remaining life of the loans. In other words, the periods that have not yet happened. Now, for these periods, we will have to estimate your remaining lifetime losses as of December 31, 2020. The last two columns show the inception to date charge-offs and total lifetime charge-offs.

As you’ll see in the last column, total lifetime charge-offs have only been computed for 2015 vintage year, as this pool is the only vintage that has fully paid off by the time we calculate our numbers. In other words, total lifetime charge-offs have not been computed for years 2016 to 2020 vintages, as they have not come to a full term. Now, let’s turn to the next slide where we compute our loan charge-off rates. On Slide 30, we’ve calculated the dollar losses shown on the previous slide to percentages.

If you recall the formula, we took the loan charge-off experience in the particular period and compared it to the origination amount. Now, remember, the loss experience in each period is divided by the origination amount and not the outstanding loan balance.

John Rieger: Sarah, let’s do an example here. For instance, for 2015 vintage year, we take the charge-off amount experience in period one for 2016, which was $2,000, and divide that by the origination amount of 5.5 million to get four basis points. For period two, or year 2017, we take the charge-off amount of $19,000 from our prior slide and divide that by the origination amount of $5.5 million to get 35 basis points.

Sarah Chae: You got it. Let’s turn to the next slide. On Slide 31, now that we’ve captured and organized all historical charge-off data, we’ll go over the estimation process to compute your allowance for credit losses here. The red boxes represent your historical charge-off rates computed on the prior slide, and the gray shaded area will be our
projections to estimate your future credit losses. In our example, we will be using historical charge-off data from 2016 to 2020, which is circled in red. We’ve used a straight average to arrive at our average historical charge-off rate, but a weighted average can be used as well.

**John Rieger:** So, for period one, you would take charge-off data from vintage 2015 to 2019 to get to the average of three basis points. For period two, you would take charge-off data from vintage 2015 to 2018 to get to the average of 50 basis points.

**Sarah Chae:** That is correct. We apply the average charge-off rates to estimate the remaining losses in each vintage shown in red font in the gray shaded boxes. Now, you’ll see that for 2020 vintage, we estimate that period one will experience a loss of 3 basis points, and period two will experience loss of 50 basis points, and so on. Now, I would like to emphasize one thing here. There’s definitely judgment that goes into which historical loss period to choose from.

Now, management should determine which loss period most represents the expected credit losses to occur in the current loan portfolio. Some considerations to think through are any changes in underwriting, or maybe geographical locations that may exhibit different loss patterns in the current portfolio that the historical charge-off data may not capture. Now, these conditions should be reviewed carefully to determine how management will need to make adjustments to the historical charge-off information. Next slide.

We are on Slide 32 now. This slide has the same charge-off information from your previous slide, and we will now walk through your calculation of your allowance for credit loss amounts. Again, the numbers shown in the white background are your historical charge-off rates, and the gray shaded areas will be our assumptions to estimate your future credit losses. We summed the gray shaded area to get to your remaining lifetime charge-off rates. For 2016 vintage year, there is one remaining period before the pool pays off, and the estimated remaining loss for that last period is four basis points. Now, for 2017 vintage year, there’s two remaining periods left and the estimated loss for the last two periods is 19 basis points.

**John Rieger:** For 2017 vintage year, you added 15 basis points in period four—and four basis points in period five to get to total remaining lifetime charge-off percentage of 19 basis points.

**Sarah Chae:** That is correct. We then applied the remaining lifetime charge-off percentage to the origination amount to get remaining lifetime charge-off dollar amounts.

**John Rieger:** In other words, you multiply Column A shown in red font to Column B, which gets you to Column C.
Sarah Chae: That is correct. The total unadjusted lifetime historical charge-off is $81,000, which is the sum of your gray shaded area under Column C. Now, we’ve got the starting basis point of our historical charge-off rate of 81 basis points, we need to consider our current conditions and reasonable and supportable forecast. In our fact pattern, we illustrated that this would simply be 25 basis points. So, we will add the 81 basis points and 25 basis points together to get to your 106 basis points, or your total allowance for credit losses of $106,000. Okay. We got through it. Hopefully, you guys are still with us. Now, I will turn it over to Joanne.

Joanne Wakim: Great. Thank you. So, I just want to say thanks very much for that, for walking us through that. That was a lot for everyone to hear on the phone. Thank you, Sarah, for walking us through it. We hope that that was helpful in terms of thinking through how smaller, less complex community banks may implement CECL. Bob is going to remind us of some key reminders and talk about some other topics, so I’ll turn it over to Bob.

Bob Storch: Thank you, Joanne. Now that John and Sarah have gone through the examples, I’d like to return to our key reminders on Slide 33. You saw these warnings once before on Slide 13, but they bear repeating, at least briefly. The loss rate methods that have been illustrated today are just a starting point. As you saw on Slides 9, 10, and 11, management must make qualitative adjustments, as necessary, to the unadjusted lifetime historical charge-off rate for each portfolio segment as part of a holistic process for arriving at an appropriate estimate for the overall allowance for credit losses under CECL.

I would also like to remind you that today’s three examples are not a complete set of loss rate methods nor should they be viewed as the methods preferred by the regulatory agencies, and these methods also should not be viewed as a safe harbor. Although our focus today is on loss rate methods, an institution may choose to use a non-loss rate method to estimate its expected credit losses under CECL. Non-loss rate methods include probability of default/loss given default, also known as PD/LGD, migration analysis or roll rates and discounted cashflows.

Institutions do not need to use a loss rate method. As the agencies stated in their Frequently Asked Questions, institutions are able to use judgment in selecting and developing credit loss estimation methods that are appropriate and practical for their circumstances. With these observations in mind, let’s move to Slide 34. We’ve been talking about different loss rate methods that the managements of smaller, less complex institutions may find appropriate. At the same time, it’s important to emphasize that no one method is necessarily superior to other methods in all cases.

Additionally, an institution may determine that it would be best to apply different estimation methods to different loan pools or portfolio segments. In effect, the ultimate driver for selecting and applying a particular method is the underlying loss data, which is why
it’s important for institutions to understand their loss history that supports the baseline calculation of unadjusted historical charge-off experience.

As it relates to loss rate methods, the managements of some community institutions may face challenges in implementing these methods under CECL that are not dissimilar to challenges they may currently face with loss rate methods under today’s incurred loss methodology. Challenging situations that are common to all loss rate methods for some institutions when applying CECL include loan losses that have been minimal or nonexistent for particular segments of the loan portfolio or for the portfolio as a whole, loan losses that are sporadic, which means that there is no observable predictable pattern to an institution’s losses, loan pools or portfolio segments with a limited number of loans, and loss data that are available only for a short historical period, which typically means that management needs to look to loss data from external sources such as peer data.

In addition, the composition of an institution’s loan pools or portfolio segments may vary significantly from the composition of the pools or segments in previous periods. Finally, today’s economic environment, or the environment at the date we’re during the CECL measurement, and the forecasted direction of the economic environment may differ from the economic environment that existed during the period for which historical loss data are available.

These are situations where management will likely need to make significant qualitative adjustments to their quantitative calculations of unadjusted historical loss experience, regardless of the allowance estimation method that management uses. In the examples that John and Sarah walked through, they had the very easy simplifying assumption of 25 basis points for qualitative adjustments. But in the real world, management will need to document and support their qualitative adjustments.

The situations I’ve just described that are challenges for institutions demonstrate why, on top of determining historical loss information as a starting point, it’s equally important for management to evaluate the need for and the magnitude and direction of qualitative adjustments. Although, the focus of today’s webinar is not on qualitative adjustments, please keep in mind that, as mentioned earlier, qualitative adjustments under CECL include adjustments for both current conditions and, what is new, reasonable and supportable forecasts.

In other words, it’s the combination of historical loss experience and qualitative adjustments that management should be assessing holistically to achieve the objective of the CECL methodology and ultimately arrive at an overall allowance for credit losses that is appropriate and supportable. Now, I’ll hand it over to John, who will provide further comments on data under the CECL methodology.

John Rieger: Thanks, Bob. I’m going to spend a few moments on data needs and sources. CECL allowances are based on lifetime loan losses with this as the starting point. It
is important to determine historical lifetime loss rates for loans, and this can be determined by pooling this information from loan history. If you don’t have lifetime historical loss data, you will need to turn to other sources of data for your starting point.

Sarah showed us how she used historical loss information in the examples. You need to consider what lifetime loss history to use. If you’re in a weak economy, you probably shouldn’t use lifetime of loss history for a strong economy. We covered three different examples of possible methods that could be used in arriving at your starting point for the CECL allowance. Remember, these are only examples. Which method or methods you use for different segments or portfolios may be determined by what kind and how much data is available to you.

You may start out thinking one method is better than the other and find out it just does not work, either because of data issues or improperly skewed results. You need to consider your loan systems and the amount and the type of historical information that is retained or available to determine your lifetime loss rates. Certain loan systems may not retain complete lifetime loss information. In addition, complete lifetime loss information may be in different systems, such as loan payments in one system, charge-offs in another, and recovery is yet in another.

Some core service providers offer only limited loan history in systems depending upon what you contracted for, so system archiving may be an issue. The simple examples presented were calculated in a spreadsheet with the detail also included in the spreadsheet. We are not suggesting that you maintain loan data in spreadsheets. In fact, as Joanne mentioned, you may need additional data warehousing to accommodate the volume of data that is required.

As indicated in the agency’s CECL FAQs, institutions need to determine what data is relevant for estimating lifetime expected credit losses they have and what relevant data they do not have. The time is now, while there is time to before the effective date of CECL to begin developing the data retention plan to calculate the historical loss experience. Remember, determining historical loss rates is only the first step.

As previously mentioned, you still need to factor in the reasonable and supportable forecasts. Now, some things to think about. Institutions that have gone through multiple mergers or acquisitions with various systems may have more challenges, while other institutions with more centralized systems may have an easier time of that. Now, let’s turn to Slide 37. This is simply a list of the data that was used in the three examples that we used today, so I’m not going to run through those. You can go through those in your own time.

Now, let’s move to Slide 38. I’ve listed here some additional data that may be relevant. The question comes up and we’ve heard it before, “What if your bank doesn’t have all the data needed to determine your lifetime loss rates?” You may need to consider peer data and other external data. You may need to consider proxies. You may need to use
other extrapolation and interpolation methods. As we have said several times, the agencies expect a good faith effort.

However, the agencies will expect improvement over time in the institutions processes for estimating lifetime expected credit losses. And finally, you need to consider the quality of your data, how much you can rely on the information in your data systems. Now, with that, I’m going to turn over to Sagar.

**Sagar Teotia:** Thank you, John. This is Sagar Teotia. I’m the Deputy Chief Accountant at the Office of Chief Accountant at the Securities and Exchange Commission. I appreciate the opportunity to be here and speak with you today. We in OCA have been very active in overseeing the development and implementation of the CECL standard, and we spend considerable time evaluating the requirements of the new standard and monitoring implementation activities to date.

As part of that, we’ve met with various members of the accounting profession, including representatives from financial institutions, registrants, accounting firms, other regulators and industry groups. I know when many people think of the SEC, they think of us regulating public companies. For the vast majority of those on the call who are not public companies, don’t worry. When we were approached to participate on this webcast, we were very happy to have the opportunity to share a few observations on processes and controls that I hope everyone will find helpful as you continue your implementation efforts.

If we could turn to Slide 40, please. So, understanding your starting point. A lot of great points have been mentioned earlier today, so I’ll just reiterate a few of those in terms of starting point. First, the standard does not prescribe an explicit approach for developing the estimate. However, the objective of the standard is to reflect management’s best estimate of losses at the reporting date. Said differently, in other words, the standard allows for a method that reasonably reflects an entity’s expectation for credit losses.

The estimation and reporting of the estimate for CECL is an important responsibility that institutions are tasked with completing. The need for controls and processes in this space is very important. If we turn to Slide 41, I’d like to highlight some of those considerations. Slide 41 outlines processes and controls. I wanted to remind folks that the expected credit loss estimate is subject to the same financial reporting requirements that apply to other assets or liabilities of an entity.

Management’s documentation of policies, procedures, methodologies, and decisions are necessary under today’s allowance standard, and will continue to be necessary to support books and records upon the adoption of CECL. Management must develop and employ a methodology that complies with the accounting guidance. As part of this methodology, entities need to estimate all expected credit losses and use of reasonable and supportable forecasts. For those companies here on the call that do have audit committees, the process of implementing a new standard is clearly a collaborative effort.
Where we’ve seen people have good success, to the extent there is an audit committee, is the importance of the audit committee in promoting an environment for management’s successful implementation of the standard, which cannot be overstated. Through its overseeing function, audit committees play a key role in establishing the right tone at the top of a company. Similar to this concept, to the extent companies here have dealt with other new standards, obviously, leveraging best practices would be something that we would recommend, as well.

With that, if we could please turn to Slide 42, a few more items on processes. So, we’ve got guidance in SAB 102, which to be clear is parallel guidance to the 2001 policy statement. This will continue to be relevant in evaluating whether the key principles of the accounting standard have been achieved. To illustrate and give an example, one of the items in SAB 102, and the 2001 policy statement, is the need to consider all relevant factors affecting collectability which will continue to apply when determining the allowance and provision for current expected credit losses.

In terms of the last bullet point, OCA’s available and welcomes consultation. As I mentioned earlier, we’ve been very active with implementation activities. To date, we’ve already received a handful of pre-clearances on CECL questions, a lot related to scoping that we’ve addressed. We’ve had numerous informal questions regarding implementation questions raised by various stakeholders. Like the other standards, we continue to be open for business and are of course happy to talk. With that, I’ll pass it along to Kyle Thomas to discuss where we go from here.

Kyle Thomas: Thank you, Sagar. This is Kyle Thomas, with the Conference of State Bank Supervisors. As we begin to close out today’s presentation, we’d like to include a few slides on where we go from here or, perhaps, how to begin. To reiterate, it is important for financial institutions to get started on this process. While each institution’s detailed timeline may differ, there’s no doubt that all will benefit from early action. Moving on to Slide number 44. As the title of this slide indicates, you’ve already begun the process by simply listening to today’s webinar.

You can continue by further familiarizing yourself with existing guidance, many of which are listed on the resources slide near the end of this presentation. Now, some of this material is listed on this slide including the Joint Statement on the New Accounting Standard on Financial Instruments - Credit Losses, which was issued on June 17, 2016. In addition to that early statement, interagency FAQs have been released and will continue to be updated. Don’t overlook the ASU itself.

Despite what you may have heard, the portion of the ASU applicable to most financial institutions and certainly community banks are only a fraction, about 22 pages of the 280 total pages of the new standard. Next, I would say create a cross-functional CECL team in your institution and a CECL project plan. As others have said, CECL is not just an
accounting function. It will require input and engagement from credit, internal audit, accounting, ALCO and management, just to name a few examples.

As you proceed down this path, use resources that work for your institution. One such resource may be the CSBS, CECL readiness checklist for community banks, which we released in September of 2017. This tool breaks down the implementation path into a series of steps that may assist an institution in becoming familiar with the requirements, the implementation timelines, and the overall process an institution could go through in preparation for the date.

The tool is flexible and designed to be modified to suit an individual institution’s needs, and it can be found at www.csbs.org. Finally, one of the most basic and beginning steps is to determine your implementation date, which depends largely on whether your institution is considered a public business entity. While not the purpose of today’s webinar, determining the status will allow your institution to find your implementation date and begin to work backwards.

There are several resources out there to help you determine your institution’s PBE status including a helpful FAQ document on the AICPA website, and a link to that site is also included on the resources slide that I mentioned earlier near the end of the deck. Let’s move to Slide 45, which captures a few logical next steps. So, once you begin, keep the momentum going by determining next steps and setting a few targets, and a few possible next steps listed on this slide include discussing the methods presented today and determining which ones of the ones we discussed today might work for your institution and which ones might not.

As a reminder, it would be good to review your existing allowance methodology and compare it to the examples presented today. Is there a method from today’s presentation that is already fairly close to you to what you’re used to using today? Begin to inventory data. Data, as others have mentioned that are used under existing allowance methodologies may be very useful under a CECL methodology and maintaining such data will help ensure a useful dataset is available for whatever CECL methodology is ultimately chosen.

Some questions have come in about vendors and the requirements for vendors and the messaging that vendors are putting out in the public domain. I want to just draw a distinction between our recommendation of communicating with your existing vendors versus engaging with a new vendor. I think what you’re hearing from us is that it is important to speak with your existing vendors who may maintain your data to ensure that they’re going to keep track of the data that you need for a sufficient period of time. That’s different than engaging with a new vendor for different purposes.

In that regard, the last item I would recommend is keep a list of data in those systems that you use today. Like I said earlier, communicate with those vendors that you’re already using and ensure that that data is maintained for a sufficient period of time. And then last
but not least, consult with your auditors and/or regulators on your discussions and your plans as they continue to evolve.

Moving onto Slide number 46, and in keeping with the evolutionary concept, you’ll see the slide starts off with adopt and adapt. The move to CECL will be an evolving process, and it’s definitely not a once and done exercise. We think of this here through a life cycle of adopt, monitor, and adapt. So, as others have said, now is the time for implementation planning, which should identify issues that need to be addressed. And, of course, not all of these implementation issues will be known immediately, so equally important here is the monitoring and adapting aspects of this slide.

The notion of adopt and adapt does not mean that an institution gets a free pass. In other words, you still are expected to remain GAAP compliant. And while the current incurred loss method remains in effect until your CECL effective date, as Bob said in his earlier remarks, “You can likely build your CECL model around what you’re using now in the incurred loss model.” At the end of the day, the overarching idea here is that we regulators know that methods and models may not be perfect on day one of CECL.

But by getting started early, and as long as the method is GAAP compliant, we will be understanding of changes and adjustments that get made throughout the implementation phase. As more data comes in and you’re understanding of how your chosen CECL models and methods work for your institution, the life cycle of adopt, monitor, and adapt should naturally lead to an evolving process. And with that, I would like to turn it back to Joanne.

**Joanne Wakim:** Great. Thank you. So, we’re closing in on the end of our presentation. We’re at the finish line, at least for the prepared remarks. So, let’s move to Slide 48. Just a couple of reminders, as well. You’ve seen this, two other times before, and so we do just want to make sure that we leave you with this. This is something that is top of mind for you, which is that this session is about providing you education and information about a starting point.

Management must make necessary adjustments to get to an overall estimate of the allowance. We’re using the phrase “holistically.” We did get a question on, “What do we mean by holistically?” But to get your overall CECL allowance that takes some historical loss rate information, adjusts it for current and forecasted—a forecast of the future. That’s what we’re talking about when we’re talking about holistic. That goes the whole—the multistep process. We’re just talking about the method, but there are additional parts of that process that you have to do to arrive at a holistic or final allowance estimate.

We did not cover a complete list of loss rate methods, and none of these are methods that you can automatically choose and assume that you will not get any questions from your examiner, so there’s no safe harbor. And then you can choose a non-loss rate method, so you don’t have to choose any of the ones that are here. As Bob mentioned, there is not some perfect method that works for every single institution in all cases for all
portfolios. You really need to look at each of these to see what is going to be the best for you.

So, we have provided you information, and so now we want to get some information from you, so we have a polling question. So, if we move to Slide 49, you’ll see a polling question, and it’s a simple question with eight different options, and we really want to know what you think. So, please, if you have a second, we would like you to respond. The question is: Would your institution consider implementing CECL using any of the methods presented today? And as I said, there are eight options ranging from yes for each of the three methods that we provided, and then you might consider, “Yes, two or three of these methods.” “I don’t know. You need more time to think about.” “No. You can’t see your institution using any of these on your own.” And so you would want to purchase some kind of—or use a vendor—or you’ve already used a vendor or purchased a vendor software package, or you’re going to use a different method.

So, if you could take a minute, and select your answer and then hit submit, and then we’ll be able to share the results. As you are doing that, we’re going to move to Slide 50, which has resources. There are links provided here to different resources from the FASB, so those would be from the standard center, some interagency guidance, some specific Federal Reserve resources, FDIC resources, CSBS, and then the AICPA has a website for accounting for credit losses, so please take a look, and if you need any additional resources there are many great places to go that we’ve provided on Slide 50.

Slide 51 has all the acronyms that we used, and if we didn’t mention this in the beginning, forgive me for not mentioning that there was a slide that explained all of the acronyms that we use, so here they are. If you’re re-listening to this session later, this may be of assistance to you. Let me ask. Do we have the results of the survey that we can put up for the audience and for all of us? Okay. So, maybe we’re getting responses, so as we do that let’s move to Slide 52, and as soon as we get the pooling response, we’re going to move into the Q&A portion.

We have received some questions ahead of time. We’re going to tackle those first, and then we’ve received questions while we’ve been online. We’ll take those time permitting, and then we will take a look at the questions that we get in particular themes and see how we can provide you information relative to the themes that we have received. So, now, you are seeing results of the polling responses, so we’re trying to get that up on our screen right now.

As we’re doing that, what we might do is just move to the Q&A portion, and then right before we finish the Q&A, we’ll get to the polling results. Kyle, you’re going lead us and facilitate the Q&A portion.

**Kyle Thomas:** Sure thing. Thanks, Joanne. This first question will go to Bob Storch. The question is: Community banks generally do not have the resources internally to generate
Ask the Regulators

CECL Webinar for Bankers: Practical Examples of How Smaller, Less Complex Community Banks Can Implement CECL (February 27, 2018)

complex models for the allowance calculations, and we have seen comments from regulatory groups that community banks will not be expected to use complex modeling methods that may be applicable to larger, more complex institutions. What assurances are there that those requirements for larger institutions won’t trickle down to community banks?

Bob Storch: Thanks, Kyle. I think I would emphasize that institutions should look at our Joint Statement and the Frequently Asked Questions to assess the views and expectations we’ve set forth. We have emphasized through this presentation, and I think it’s clear in the Joint Statement and the Frequently Asked Questions as well, that the CECL standard was designed to provide flexibility to institutions. It’s designed to be scalable and tailored to the size and risk profile of the institution, and we also emphasize that. I think John had mentioned in his remarks that we expect institutions to make a good faith effort to implement the standard in a way that provides a reasonable estimate of the expected credit loss allowances that will apply as the institution reaches the effective date.

So, I think our messaging in those documents, Kyle, would be the source we would point to as what institutions could rely on in terms of the expectations for non-trickle-down effects, so to speak, from the largest banks to the small banks.

Joanne Wakim: Bob, can I just make an observation? Yes, I think, hopefully, the webinar today illustrates that we are not suggesting that a bank needs to use complex modeling techniques. Hopefully, this as well, helps with that.

Bob Storch: Agreed.

Kyle Thomas: Thank you both. The next question also goes to Bob. The question is: We are a community bank and have listened to several webinars and presentations regarding CECL, but still feel that we don’t have a good way to begin. The webinar suggests we should begin collecting information that we have to be able to develop using our own process. We would like to take the route of developing our own process for CECL, but are wondering if you have any direct guidance? Before I turn it to Bob, I would mention that in one of my slides, I mentioned CSBS has a resource. You may find that useful in your efforts to develop a process and get started.

Bob Storch: Thanks, Kyle. In addition to the readiness tool that you mentioned from CSBS, I think the three examples we walked through today would be helpful for institutions to consider if they haven’t had a good feel to date on how there might be methods that are practical for them to use and apply and that may not be unduly different from the incurred loss rate methods they’re using today. We also had a slide that talked about the data that were used in those examples, and it really is a fairly limited set of data compared to some remarks I’ve heard that institutions need hundreds of data elements to implement CECL.
I don’t think, for a smaller or less complex institution, that’s our expectation at all, which is why we signaled those types of data elements on that particular slide. Those types of data would be the ones we would anticipate the institution would look at to see whether they’re available and are being maintained by their loan core systems processor and, if not, what the institution may need to do to begin maintaining that data going forward.

I think that for institutions that use queries today into their loan system, a lot of that type of data would be available through the query process and could be input into their CECL methodology under one of the loss rate method alternatives.

Kyle Thomas: Great. Thank you, Bob. The next question goes to you, Joanne. The author writes: It is very possible information needed for future estimates pertaining to historical loss periods will not be able to be produced by banks that have not already begun tracking such data. How will this impact regulatory exams or reviews of banks which are unable to retrieve the historical data?

Joanne Wakim: Great. Yes, I agree with the point. It is very possible that information needed for your estimate has not been tracked to date. So, our guidance that we’ve issued from 2016 onward has focused on the need to start tracking data now. Kyle mentioned that as well. When you implement the standard in, I’ll say, 2021, for most of the institutions on this call, and then you will at least have some data if you start tracking beginning now. You will probably need to supplement with peer data or market data, and that is acceptable.

As it relates to what the examiners will think when they go onsite, each of us is responsible for providing training and education to examiners now, and that’s a key part of our messaging to them, what to expect at the implementation date and that many banks may not have all the data that they need at implementation, and so we do expect institutions to use peer data or other market data. The other comment I would make is that we often say that—As Kyle mentioned, the implementation of CECL is expected to evolve over time, and we want a good faith effort.

Around data is a good way to—that’s an example of the evolution that we expect to happen, which is you’re going to have a certain set of historical data if you start tracking it now, and then as five or ten years go by, obviously, you’ll have a lot more data. So, that’s part of that evolution of CECL over time.

Bob Storch: Joanne, this is Bob. I would add that if banks have not reviewed the Frequently Asked Questions, which we’ve cited numerous times, I think the FAQs are a helpful source of guidance and would help answer a number of the questions that we’ve had here. On this particular point, there is a question that was added in September, and it talks about this—I guess because of concerns bankers may have about examiners requiring a bank to go back years in time.
The question says, “Will agencies require institutions to reconstruct data from earlier periods that are not reasonably available to implement CECL?” Consistent with what you were talking about, I’ll just mention the final sentence of the response. “The institution should promptly begin to capture and maintain” data of the type that’s not available or no longer accessible in its loan system without undue cost and effort, which is a key provision of the accounting standard itself, “on a go-forward basis so it can build up a more complete set of relevant historical loss data by the effective date ... or as soon thereafter as practicable.” That response is something that banks could point to if they’re being challenged about the amount of data they need from the past that really isn’t available without undue cost and effort.

**Joanne Wakim:** Yes, I agree.

**Kyle Thomas:** Thank you both. The next question relates to another small institution historical loss rate question and this one again goes to Joanne. The question is: My frustration with CECL is that we’re getting conflicting messages. Regulatory executives try to downplay the impact while the experts out there indicate that significant detail and complexity will be required and that there are mindboggling historical record requirements. As a banker, my frustration with using historical loss history is that we are so small, one significant loss in one loan category can skew our entire calculation. For example, if we charge-off a $100,000 loan in a category that has a $1,000,000 in total, we are going to have an unrealistic loss rate. Can you please clarify what your expectations are for handling such small loan portfolios?

**Joanne Wakim:** Yes. That’s a great question. So, I’m going to address two different things in the question. The first being the comment that regulators are trying to downplay the impact by saying, “You don’t need a vendor.” But then when you get details from others, it feels like the data recordkeeping is mind boggling. So, Kyle, you eluded to it. There are two ways to think about the use of vendors. One is you can use the vendor for the calculation itself. That’s what Sarah and John walked us through, and that’s what we mean when we talk about using a spreadsheet, or you could choose to acquire a package from a vendor to do that calculation.

The other way you might need a vendor is for maintaining loan level data over time. In other words, housing your loan data. When we talked to smaller, less complex community banks about using vendors, you know, for the calculation itself, our message is that you may be able to do this in a spreadsheet. You may choose to use a vendor package. It’s up to the institution, but we want to make sure we provided some education and information about the calculation itself and that we think first and small or less complex community banks, it can be done on a spreadsheet.

For maintaining the loan level data over time, my personal view is for most banks, it won’t be possible to maintain your loan level data on spreadsheets due to the volume of
data that you need to keep and then retain over time and the need for a strong internal control environment to ensure no errors. It’s just very difficult to do on a spreadsheet. More than likely, you’ll need either your core loan service provider or a vendor.

So then, regarding the second part of that question, I’d say addressing banks that have had very few loss events. So, I think that’s exactly right. For banks that have very few loss events or the pattern of losses is so sporadic that you don’t have a statistically sound level of loss events for some kind of pattern to emerge or for you to use that data to make some predictions about the future. In that situation, your qualitative factors will be very important. That’s what Bob covered.

And with very low loss experience over the last 10 to 20 years, which we understand many small community banks have that experience, you would probably be able to support having a low allowance considering your historical experience over a very lengthy period of time, which would include an economic trough and a peak. Like, you could say over a long period of time, over a full economic cycle, you have very low loss experience, and I think you would use that and then that would be something you would use to justify a low allowance. I don’t know if anyone has any other thoughts on that.

**Bob Storch:** Joanne, this is Bob. I would just mention that that’s not necessarily a problem solely under CECL, as I alluded to in my comments. We have banks that have that problem today under the incurred loss methodology. The agencies, in their 2006 questions and answers that supplemented the 2006 interagency policy statement on the allowance, actually have a question 15 that talks about institutions with very low or zero historical losses and provides a similar sort of response about the importance of looking at qualitative factors where you don’t necessarily have the loss data to support—or be a starting point for—a high allowance number as opposed to a small number.

Even if you’re using external data such as peer data, if the bank’s performance is that strong, qualitative adjustments are not limited to being additions. The adjustments can be subtractions from your unadjusted historical loss data, which may be supportable in some smaller institutions’ cases if they have hardly any loss experience in a particular portfolio. At the same time, a bank cannot ignore what the economic forecast may be that could affect collectability going forward.

**Kyle Thomas:** Thank you both. The next question is for John, and it’s admittedly very similar to the previous question, but I think there’s a nuance here. The author writes, “Can we, or should we use peer historical loss rates for CECL? We have very little loss history. So, using our actual loss history would not be very helpful.”

**John Rieger:** Thanks, Kyle. I actually talked about this with one of my slides, the ability or the necessity of using peer data or other external data if your current historical data is not available that supports the credit loss history. You may be required to use a qualitative adjustment if you’re using outside peer data. But I also want to make a reminder
Kyle Thomas: Thanks, John. Moving onto the next question. We will direct to Shayne. The question is: Could you briefly discuss the possible segmentation of cash secured loans? We have internally debated at our institution and feel that since they are basically secured 100% by cash, the loss is virtually a nonissue. Therefore, that segment could conceivably have no reserve? Or is there an expectation that there should be a reserve, and how do you quantify how much reserve if we’ve never had a loss in that segment historically?"

Shayne Kuhaneck: Thanks, Kyle. It’s a great question. Really, it boils down to the question that we’ve gotten a few times at the FASB, which is, “When can I have zero loss reserves?” At the risk of sounding like a wonky, technical accountant from the FASB, I am going to give you a couple of paragraphs out of the codification that you can point to, and it will help you understand what the Board’s thinking here was.

So, the first paragraph is 326-20-30-10, and in that paragraph there’s a sentence where the Board states, “However, an entity is not required to measure expected credit losses on a financial asset or group of financial assets in which historical credit loss information adjusted for current conditions and reasonable and supportable forecasts results in an expectation that nonpayment of the amortized cost basis is zero.”

And you’re probably saying, “Well, what does that mean?” Well, that addresses the point of, do I need to just calculate a reserve for the sake of calculating your reserve? Or is it possible to get to a zero-credit loss? And I would say that this paragraph indicates that it is possible to get to a zero-credit loss, especially when nonpayment of the amortized cost is expected to be zero.

Now, what the Board didn’t want to do was actually specify which classes of assets and in which situations you could have a loss of zero, because it becomes a list, and then that list needs to be updated and that list isn’t always accurate. The other thing that I would point out on in the same paragraph, is that it says, “Nonpayment of the amortized cost basis to be zero shouldn’t solely be based on the current value of the collateral securing the financial assets, but instead shall consider the nature of the collateral, potential future changes in collateral values and historical loss information for financial assets secured by similar collateral.”

So, again, this goes back to Joanne’s point of taking a holistic approach at how you look at, “How do I get to zero losses?” Is the cash that is securing the loans 100%? Is it there to secure the loans all the time? Is it just available for those loans? Can it be used for something else? If you need to do an assessment in the future, will the cash in the future be there, not just at the reporting date? Because remember, this is a lifetime loss. Finally, I
would point to example eight, which starts at paragraph 326-20-55-48, where it is—The Board provides an example of zero-credit losses. Now, granted, this is a treasury security. However, I will say the Board did not intend for this only to apply to treasury securities. It just gives some helpful principles as to what one would look to when you’re actually trying to determine if you have zero-credit losses.

**Kyle Thomas:** Thanks, Shayne. Moving right along, Joanne, this next question is for you. If a bank wants to get into a new line of lending, how should they determine the anticipated lifetime loss rates?

**Joanne Wakim:** Very good question. I would point back to the questions that we’ve had that we’ve answered the last five or ten minutes about data, and that whether you have an existing line of business but have not been tracking the data, or you get into a new line of business and don’t have data, you would then look to market or peer data for that period of time. You would start tracking it, but you would need to look at peer data in order to come up with what your loss rate might be for your lifetime loss estimate.

Can I spontaneously take another question?

**Kyle Thomas:** Absolutely.

**Joanne Wakim:** The reason for this is we’ve received a number of questions on, “What’s a smaller, less complex community bank?” I feel like it’s certainly something we want to try to answer before we get done, and we’re four minutes to closing. So, I would say it this way, and then Bob and others I’m interested in your point of view. So, we have decided we’re not establishing a bright line for what is a smaller, less complex community bank. I think, in part, because we’re not trying to keep banks out. If we were really trying to narrow that and make sure nobody was in it, we would pick a bright line and do some lower asset size for that. So, we’re really not trying to keep banks out of considering themselves a smaller and less complex. I mentioned we have approximately 6,000 people on this phone, so the majority of you are going to be, just by numbers, and by how many banks we have that are within the different asset sizes, the majority of you are going to fall into that category of smaller, less complex.

But I think another way to look at it would be if you do something more complex now, an examiner may ask why you’re reducing your effort and complexity. Then, if you are doing something more complex in other areas, but you’re choosing to not do that in CECL. You might get a question in terms of why you’re making those choices. But, you know, if you’re doing something that’s similar to this now, it would make sense that you would probably fall into that category of institutions where this makes sense.

The other question that we got was from an institution that was around $15 billion. “Hey, could I be considered a smaller, less complex, because I’m a monoline? I just do residential mortgage loans?” I think there what I might say is, you know, some of these
methods like vintage aren’t necessarily considered shortcuts or anything. That’s a realistic method a bank of any size might utilize. Then, it’s just how many segments you have and whether you would do it in a more automated fashion versus a spreadsheet.

But it’s not as if some of these methods would not be appropriate for a larger institution. It’s really the combination of spreadsheet-based and loss rate method that might really focus a lot of our comments to smaller, less complex community banks, but some of these concepts like the loss rate vintage method would apply and be appropriate for a larger institution. I don’t know if anybody has other comments on that.

Kyle Thomas: As I scan the remaining questions that were submitted ahead of time, I think we’ve covered many of the key concepts, and so if it’s okay, I think we can jump to the first submitted question throughout today’s webinar, and that question is: At a recent training, there was talk that there could be additional clarification that would exempt smaller community banks from this. Also, there was mention that instead of a one-time injection, it could be split up over three injections into the reserve. Is there truth to either of those statements?

Bob Storch: This is Bob Storch. I think the short answer to both of those questions is no. The FASB has issued the final standard. By law, banking institutions are required to prepare their Call Reports in accordance with accounting principles that are uniform and consistent with GAAP. So, as long as the CECL standard is GAAP, institutions will have to apply it. As was mentioned, there’s a later effective date for the smaller banks that are not public business entities, so that gives you more time to prepare for it.

I’m not sure what a one-time injection split up into three is. The accounting is what it is. When the effective date arrives, you need to adjust your allowance to reflect your best estimate under the CECL approach, and the adjustment wouldn’t go through earnings, it just is a direct cumulative-effect adjustment to your retained earnings, but it will affect your capital. Now, the word Basel doesn’t always ring that nicely with community banks, but the Basel Committee has issued interim guidance, because globally, not just in the U.S., there’s been a move to expected credit loss methodologies. The Basel Committee has indicated that national supervisors can, if they elect to, phase in from a regulatory capital perspective the impact of the change from incurred losses to expected losses. That’s something the U.S. banking agencies are aware of and will be taking into consideration as well.

We have several years yet to the effective date of CECL, so that may be what that questioner is getting at. But there wouldn’t be any adjustment to the pure accounting under CECL. But potentially, if the U.S. agencies decide to do something from a capital perspective, certainly there would be a notice and comment opportunity for the industry.

Shayne Kuhaneck: And just to dovetail off that, Bob. This is Shayne from the FASB. I just want to mention that there are no plans to defer. As Bob mentioned, there are different effective dates depending upon whether you’re an SEC filer or a PBE, or a non-PBE, and so
you have staggered effective dates and there’s some differences with disclosures, and so forth. But there are no plans by the FASB to defer, so I’m not exactly sure what that recent training was referring to. Having said that, I want to say that if you are having issues, and you do have technical inquiries, please, we are also open for business.

There’s a technical inquiry system at the FASB. Some of the resources that are provided on one of the final pages of the presentation will directly link you to that technical inquiry service. Those inquiries come directly to my e-mail inbox. They go to my team, and we answer every single one of them. So, if you are having issues, please get hold of us.

Joanne Wakim: I don’t know if you heard me mention this. There are 6,000 people on the call, so get ready for a full inbox. Finally, I do want to mention the results of the polling question. “Would your institution consider implementing CECL using any of the methods?” We had 2,300 participants respond. So, 11% said, “Yes, we would do, potentially, the snapshot open pool.” Three percent said the remaining life method. Nine percent said vintage. Thirty-five percent said, “I would consider two or all of these methods.” Twenty-eight percent said, “I need to think about it more.” Five percent said, “I would probably use a vendor software.” Six percent said, “I’ve already a purchased a vendor software.” Then, 3% said, “I plan to use a different method.”

Erik, I will hand it to you. That’s it for our Q&A and for our presentation.

Erik Soell: Okay. Thank you. This is Erik. Let me just do a couple of things to wrap up. Thank you all so much for joining us. We hope this was valuable. A special thanks to everyone here in this room. You guys know how much time and effort it takes to put this together, so thanks to you guys.