

YOUR BANK

CECL PROJECT PLAN



Each of these items serve as an area to customize the Invictus CECL Solution to best fit the Bank

As this list is completed the Invictus

CECL Team will update the according documentation

After this list is finished Invictus will continue to work with the Bank to ensure the model reflects management's views

The Bank will need to take ownership of each of these items to be prepared for CECL Live Reporting

Milestones

- **1. Data** (Oct. 2021)
- **2. Pooling** (Nov. 2021)
- **3. Model** (Nov. Dec. 2021)
- **4. Forecast** (Dec. Jan. 2022)
- 5. External Qualitative Adjustments (Jan. Feb. 2022)
- **6. Validation** (Feb. 2022)
- **7. Processes** (Feb. 2022)
- **8. Parallel Calculations** (2021Q4 2022Q4)

Week 0 (Oct.): Data

DATA

Invictus Action Items:

- 1. Communicate to the Bank what fields are priorities
- 2. Evaluate effort/reward of any fields that require additional work
- 3. Provide feedback to the Bank on any data, such as data errors or inconsistencies
- 4. Explain "Trough" data cleaning process
- 5. Process all data the Bank provides to Invictus and store in BankGenome for use in future CECL calculations

- 1. Provide historical loan, charge-off, and recovery data
- Work with Invictus to identify any additional areas that may be required for CECL calculations

Week 1 (Nov. 1st): Pools

POOLING

Invictus Action Items:

- 1. Explain pooling methodology (Risk, Size, History, and Strategy)
- 2. Provide preliminary pooling suggestions
- 3. Update pooling based on Bank feedback

- 1. Review pooling suggestion, provide feedback
- 2. Provide final approval of selected pooling

Week 2 (Nov. 8th): Special Pools

POOLING

Invictus Action Items:

- Explain required CECL treatments of collateral dependent (CD)
 & troubled debt restructured (TDR) pools
- 2. Provide options for CD and TDR treatments
- 3. If the Bank elects to have Invictus run the CD and TDR reserve calculations, then Invictus will run a parallel CD/TDR calculation to compare to the Bank's current approach

- 1. Select approach for CD & TDR pools
 - a) The Bank can elect to continue evaluating CD and TDR loans internally, or have Invictus do so

Week 3 (Nov. 15th): Model Walkthrough

MODEL

Invictus Action Items:

- 1. Walk the Bank's CECL team through the entire model
- 2. Demonstrate how the Bank can recreate the calculation internally for validation purposes

Your Bank Action Items:

1. Ask questions during the walkthrough!

Week 4 (Nov. 22nd): Prepayment Rates

MODEL

Invictus Action Items:

- 1. Refresh the team on how Prepayment Rates work in the model
- 2. Translate the Bank's existing prepayment rates into model inputs
- 3. Provide prepayment rate inputs to the Bank for review and approval

- 1. Provide any existing prepayment studies/expectations to Invictus (typically from the ALM committee)
- 2. Provide feedback on selected prepayment rate inputs
- 3. Provide final approval of prepayment rates

Week 5 (Nov. 29th): Collateral Haircuts

MODEL

Invictus Action Items:

- 1. Refresh the team on how collateral haircuts work in the model
- 2. Review the Bank's special reserve for potential collateral haircuts
- Provide suggested collateral haircuts to the Bank based on any existing materials
- 4. If the Bank does not have any current basis for the collateral haircuts, then Invictus will provide recommendations

- 1. Provide special reserve calculation to Invictus, as well as any existing collateral haircuts the Bank is already using
- 2. Provide feedback on selected collateral haircuts
- 3. Provide final approval of collateral haircuts

Week 6 (Dec. 6th): Historical Indexes

MODEL

Invictus Action Items:

- Refresh the team on how the collateral indexes work in the model
- 2. Provide options and recommendations for indexes to use
- 3. Review any indexes the Bank already has available (such as through subscriptions)

- 1. Provide any historical collateral indexes the Bank already has to Invictus
- 2. Provide feedback on selected historical collateral indexes
- 3. Provide final approval of collateral indexes

Week 7 (Dec. 13th): Unfunded Commitments

MODEL

Invictus Action Items:

- 1. Explain different approaches for unfunded commitment reserves
- 2. If needed, determine funding rates for each pool with the Bank

- 1. Select unfunded commitment approach
- 2. If needed, work with Invictus to determine funding rates
- 3. If applicable, provide final approval of funding rates

Week 8 (Dec. 20th): Selection of Bank vs BankGenome



Invictus Action Items:

- 1. Provide recommended BankGenome peer group
- 2. Run comparison of Bank vs BankGenome sampling sizes
- Provide recommended approach to selecting Bank vs BankGenome results for each pool

- 1. Provide feedback on peer group characteristics and fit to the Bank
- 2. Provide final approve of BankGenome Peer Group
- Provide final approval of selection process for Bank vs BankGenome results

Week 9 (Dec. 27th): Forecast Introduction

FORECAST

Invictus Action Items:

- 1. Walk through how the Forecast drives the CECL calculation
 - a) Economic expectation characteristics
 - b) Economic expectation weights selection
- 2. Review any economic forecast materials the Bank already has

Your Bank Action Items:

 Provide any economic forecast materials the Bank already has (such as through subscriptions) to Invictus

Week 10 (Jan. 3rd): Economic Expectations Characteristics

FORECAST

Invictus Action Items:

- 1. Provide recommended forecast scenarios (typically driven by the Fed's annual CCAR stress test)
 - a) If applicable, incorporate any existing forecast materials the Bank already utilizes

- 1. Provide feedback to economic expectations characteristics
- 2. Provide final approval to economic expectations characteristics

Week 11 (Jan. 10th): Economic Expectations Sampling

FORECAST

Invictus Action Items:

- 1. Provide recommended sampling periods and parameters for each economic expectation
- 2. Run initial sampling
 - a) Provide resulting migration tables, and sample sizes

- 1. Review sampling parameters, periods, resulting migration table, and samples sizes
- 2. Provide final approval of sampling

Week 12 (Jan. 17th): Economic Expectations Weights



Invictus Action Items:

- 1. Walk through weight selection approach
- 2. Provide recommended economic macro factors to drive weight selection process
- 3. Provide recommendation for qualitative controls and process in weight selection

- Choose economic macro factors to select weights
- Choose what qualitative controls the Bank would like to incorporate into the weight selection process
- 3. Determine forecast committee
- 4. Provide final approach of economic expectation weight selection process

Week 13 (Jan. 24th): 2021Q4 Parallel Calculation



Invictus Action Items:

- Run the 2021Q4 CECL calculation based on the previously selected model inputs
- 2. Walk through reports and results with the Bank
- 3. Identify any areas that need to be revisited or adjusted
- 4. Rerun calculation as needed based on changes or adjustments

- 1. Review parallel calculation with Invictus and provide feedback
- 2. Assist Invictus in identifying any areas that may need to be revisited or adjusted

Week 14 (Jan. 31st): External Qualitative Adjustments Selection

EQA

Invictus Action Items:

- 1. Walk through role of external qualitative adjustments in the CECL calculation and how they are incorporated into the results
- 2. Review the Bank's current reserve calculation and any other relevant materials for qualitative adjustments
- 3. 'Recalibrate' any existing qualitative adjustments into a new recommended approach for CECL
- 4. Updated 2021Q4 calculation with external qualitative adjustments

Your Bank Action Items:

1. Send existing reserve calculation, and any other relevant materials for qualitative adjustments, to Invictus

Week 15 (Feb. 7th): External Qualitative Adjustments Review

EQA

Invictus Action Items:

- 1. Walk through updated 2021Q4 calculation with the Bank
- 2. Updated external qualitative adjustments based on Bank feedback

- 1. Review updated 2021Q4 calculation
- 2. Provide feedback on updated CECL calculation
- 3. Provide final approval of external qualitative adjustments

Week 16 (Feb. 14th): Validation

VALIDATION

Invictus Action Items:

- 1. Provide list of validation areas, and recommended approaches, for the Bank to utilize
 - a) Data Validation
 - b) Report Validation
 - c) Calculation Validation
- 2. Walk the Bank through validating each of the key areas

- 1. Provide feedback on validation processes
- 2. Provide final approval on validation processes

Week 17 (Feb. 21st): Processes

PROCESSES

Invictus Action Items:

- 1. Lay out each process that is required for a standard CECL calculation
 - a) Data Transfer
 - b) Any necessary external materials the Bank must provide to Invictus
 - c) CECL forecast committee meeting
 - d) CECL committee meeting

- 2. Finalize committees
 - a) CECL Committee b) Forecast Committee
- 3. Provide feedback on processes
- 4. Provide final approval on processes

Flexible Week: Auditor Review

VALIDATION

Once the 2021Q4 calculation has been performed the Bank will want to have their auditor review the calculation and provide any criticisms/feedback:

- 1. It is standard for auditors to find at least a few areas to make tweaks/adjustments to
- 2. Invictus will be completely involved in the audit and will do any 'heavy lifting' that is required
- 3. Once the audit is complete Invictus will work with the Bank to make any needed changes

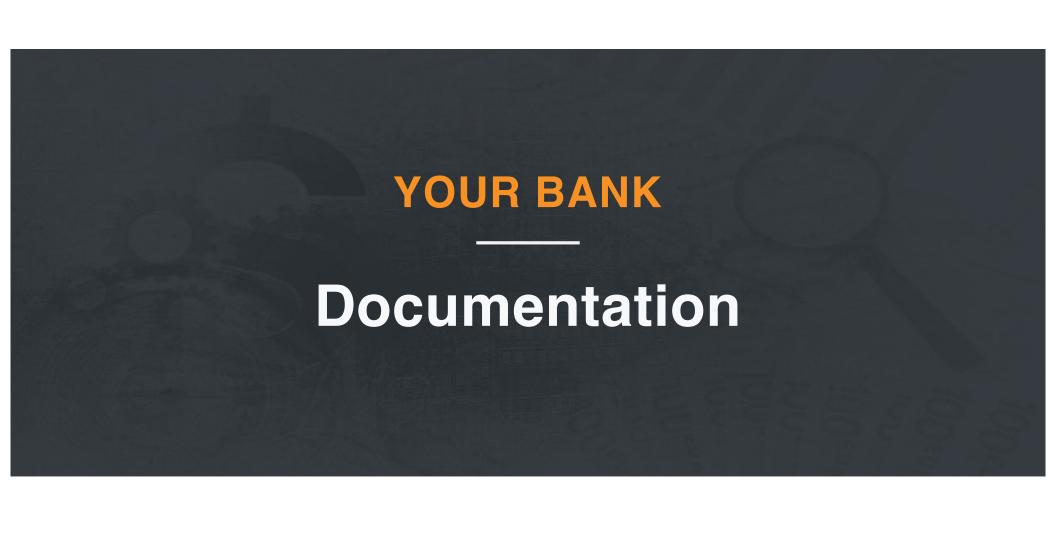
Remainder of 2022: Quarterly Calculations



Invictus Action Items:

- 1. Run the CECL calculations based on the previously selected model inputs
- 2. Walk through reports and results with the Bank
- 3. Identify any areas that need to be revisited or adjusted
- 4. Rerun calculation as needed based on changes or adjustments
- 5. Finalize any remaining open items that are incomplete or warrant revisiting

- 1. Review parallel calculation with Invictus and provide feedback
- Assist Invictus in identifying any areas that may need to be revisited or adjusted



Documentation Overview

- Documentation is critical to success in a CECL world
- Invictus has prepared a series of documents based on experiences with other clients and their validations & auditors
- 3. Each of these documents covers a key area of the Invictus CECL solution
- 4. The Invictus CECL Team will write and update the documentation as we work on completing the CECL Milestones
- The Bank will need to take ownership of each of these documents to be prepared for CECL Live Reporting

Documentation List

- Pooling (3)
- Collateral Dependent/TDR (1)
- Data Transfer Process (2)
- How the Model Works (8)
- Model Selection (2)
- LGD (3)
- Prepayment Rate (1)
- Unfunded Commitment (1)
- BankGenome (3)

- External Qualitative
 Adjustments (3)
- Forecast (15)
- Validation (3)
- Internal Process (2)
- Available Resources (2)
- Quarterly Memo
- Framework Updates

Documentation

Pooling (3)

Describes how the Bank decided to pool their loans (criteria and why)

Collateral Dependent/TDR (2)

How the CAR for CD/TDR loans is calculated

Data Transfer Process (2)

How Invictus processes the Bank's data (Trough), then sends them back for validation, also includes any assumptions made

How the Model Works (8)

How the PD/LGD Invictus CECL model works

Model Selection (2)

How Management selected the PD/LGD model over other available methodologies

Documentation

• LGD (3)

How the model calculates LGD, and the selected LGD floors

Prepayment Rate (1)

How and why the Bank selected the prepayment rates

Unfunded Commitment (1)

How the Capital at Risk for Unfunded Commitment is calculated

BankGenome (3)

What BankGenome is, characteristics of the BankGenome peer group, and why it is justified

External Qualitative Adjustments (3)

The external qualitative adjustments that the Bank applies, the reasoning for them, and how they are calculated

Documentation

Forecast (15)

Migration

How the forecast applies migration tables and translates them to PD's

Weights

How the Bank selects weights

Sampling

 Behaviors that are sampled, methodology behind selecting and applying them

Validation (3)

Describes the process whereby Invictus sends historical outputs and the Bank then checks it against the Bank's records, also reconciliations against call reports



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