NCUA
National Credit Union Administration

# Simplified CECL Tool

User Guide Version 1.0

September 2022

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National Credit Union Administration

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# 1.0 Introduction

## 1.1 Purpose

The National Credit Union Administration (NCUA) developed the Simplified CECL Tool (CECL Tool) to assist small credit unions with developing their Allowance for Credit Losses (ACL) on Loans and Leases as required under the Accounting Standards Codification (ASC) Topic 326, *Financial Instruments – Credit Losses*, known as Current Expected Credit Loss (CECL).

## 1.2 Required Systems

| Name | Description |
|---|---|
| Microsoft Excel | The CECL Tool is entirely contained in Microsoft Excel. It will run in Microsoft Excel version 2007 and later. |

## 1.3 Data Requirements

Most input data required is contained within the CECL Tool itself. Credit unions need the following minimum data available for input to calculate the ACL:

- Charter Number;
- Outstanding balance by loan portfolio segment (Call Report, Schedule A, Section 1, lines 1 through 13);
- For individual-evaluated loans, outstanding loan balances and expected collections; and
- Qualitative adjustments to net charge-off rates and Weighted Average Remaining Maturity (WARM) factors, as applicable, for each loan portfolio segment.

If qualitative adjustments are necessary to arrive at the ACL, the credit union should compile the support for determining the adjustment value, including a written justification. The CECL Tool provides for qualitative adjustment to the net charge-off rate and WARM factor in each loan portfolio segment.

## 1.4 Model Description and User Input Requirements

The CECL Tool is a Microsoft Excel-based financial analysis that allows credit unions to calculate their ACL, with separate calculations for both pooled loans and individual evaluated loans. The CECL Tool consists of six distinct worksheets (tabs), consisting of input and read-only tabs. The tab names and user input requirements are as follows:

| Tab Name | User Input Requirements |
|---|---|
| Overview | Read Only |
| Tab 0—Input | Input |
| Tab 1—Summary | Read Only |
| Tab 2—Individual Basis | Input |
| Tab 3—Pooled Basis | Read Only |
| Tab 4—Adjustments | Input |

### 1.5 Model Updates

The NCUA will update the CECL Tool for each quarter-end. The first CECL Tool effective date is June 30, 2022. Updates will include changes to WARM factors and other data updates from the previous Call Report cycle. The User Guide will be updated if enhancements are made to the CECL Tool.

## 2.0 Procedures

### 2.1 User Guide Format

This User Guide is organized from a practitioner perspective, with the goal to provide the end user a high-level overview of the process to update the CECL Tool. The tabs with inputs are populated first before reviewing output tabs; therefore, the user guide is structured to walk through the input tabs first, followed by the output tabs.

### 2.2 Access the Latest Version of the Tool

The CECL Tool is available for download on the NCUA's website from the CECL Resources webpage. When downloading and using the CECL Tool, users should ensure they use the most recently released version of the Excel file applicable to the quarter end date. The version of the CECL Tool used should match the Call Report quarter-end. For example, the June 30, 2022, version should be used for the June 30, 2022, Call Report.[1]

[1] The release of the June 30, 2022, version after the related Call Report submission deadline allows credit unions to test and calibrate the CECL Tool, as part of its due diligence in finding a CECL process to measure the ACL on Loans and Leases.

## 2.3 Color Schema

Data can only be entered into cells shaded in green. All other cells in the CECL Tool are locked and only green shaded cells are available for data input. Cells for output are shaded in grey; these cells are determined either by a data lookup or formula.

## 2.4 Tab 0—Input: Core Credit Union Data

The data entry into Tab 0 is: 1) credit union's charter number; 2) total assets as of the quarter end; and 3) total balance of each loan portfolio segment as of quarter end.

Enter the following information:

**Cell C4: Charter Number**

Enter the credit union's charter number. The charter number is used to lookup your credit union's *Weighted Average 3-year Net Charge-off Rate.*

**Cell C6: Total Assets** as **of Quarter End**

Enter the credit union's total assets. This value should match Call Report account 010.

See Figure 3.1 of the Appendix for a visual depiction of how to populate these fields in the CECL Tool.

**Cell C9—C13: Loan Balance as of Quarter End**

For each loan portfolio segment, enter the total of all loans in that category. For instance, in Cell C9, enter the total balance of all Unsecured Credit Card Loans; this value should match Call Report account 396.

If a loan portfolio segment does not have any corresponding loans, enter zero (0) as the value.

Table 2.1 provides the cell references for the corresponding Call Report account codes for the required input.

**Table 2.1: Pooled Loan Data—Cell Reference and Call Report Account Codes**

| Loan Portfolio Segment | Cell Reference | Call Report Account |
| --- | --- | --- |
| Unsecured Credit Card Loans | C9 | 396 |
| Payday Alternative Loans (PALs I and PALs II) | C10 | 397A |
| Non-Federally Guaranteed Student Loans | C11 | 698A |
| All Other Unsecured Loans/Lines of Credit | C12 | 397 |
| New Vehicle Loans | C13 | 385 |

| Loan Portfolio Segment | Cell Reference | Call Report Account |
|---|---|---|
| Used Vehicle Loans | C14 | 370 |
| Leases Receivable | C15 | 002 |
| All Other Secured Non-Real Estate Loans/Lines of Credit | C16 | 698C |
| Secured by 1st Lien on a single 1- to 4-Family Residential Property | C17 | 703A |
| Secured by Junior Lien on a single 1- to 4-Family Residential Property | C18 | 386A |
| All Other (Non-Commercial) Real Estate Loans/Lines of Credit | C19 | 386B |
| Commercial Loans/Lines of Credit Real Estate Secured | C20 | 718A5 |
| Commercial Loans/Lines of Credit Not Real Estate Secured | C21 | 400P |

See Figure 3.2 of the Appendix for a visual depiction of how to populate these fields in the CECL Tool.

## 2.5 Tab 2—Individual Basis: Individually Evaluated Loans

The CECL Tool has functionality for credit unions to calculate the credit loss related to individually evaluated loans. Loans individually evaluated are excluded from determination of the ACL on the related loan portfolio segment by the WARM methodology. However, the CECL Tool aggregates both credit losses from individually evaluated loans and from applying the WARM methodology (See Tab 1—Summary).

For each loan that is to be individually evaluated for a credit loss, the CECL Tool requires: 1) Borrower or Member Name; 2) Note Number (identification); 3) Loan balance as of quarter end; and 4) Amount Expected to be Collected. The credit loss is determined by subtracting item 4) from item 3). When entering a loan to be individually evaluated, items 3) and 4) must be entered into the related loan portfolio segment for the loan balance to be excluded from the WARM methodology calculation. A best practice is to enter one loan per row and agree the total of loans per loan portfolio segment to the related master records or subledger. For example, the total of all New Vehicle Loans individually evaluated on Tab 2 should match the total of such loans in the master records. Other forms of reconciliations may be needed to ensure that loans are properly included in their loan portfolio segment.

Enter the following information:

***Important****: Each row should be one individually evaluated loan. Add rows in the green shaded area if more rows are needed for loans.*

### Column A: Borrower or Member Name

Enter the borrower's name or identification code.

### Column B: Note Number

Enter the borrower's loan account number.

### Loan Balance and Amount Expected to be Collected Columns

Enter the outstanding Loan Balance and the Amount Expected to be Collected into these columns. Table 2.2 provides the columns related to the loan portfolio segment. If the expected amount to be collected is greater than the loan balance, cap the collection amount as the loan balance (resulting in credit loss of zero (0) for that loan).

**Table 2.2: Tab 2—Individual Basis: Loan Balance and Amount to Be Expected Population**

| Loan Balance Column | Amount Expected to Be Collected Column | Loan Portfolio Segment Type |
|---|---|---|
| D | E | Unsecured Credit Card Loans |
| H | I | Payday Alternative Loans |
| L | M | Non-Federally Guaranteed Student Loans |
| P | Q | All Other Unsecured Loans/Lines of Credit |
| T | U | New Vehicle Loans |
| X | Y | Used Vehicle Loans |
| AB | AC | Leases Receivable |
| AF | AG | All Other Secured Non-Real Estate Loans/Lines of Credit |
| AJ | AK | Loans/Lines of Credit Secured by First Lien on a single 1- to 4-Family Residential Property |
| AN | AO | Loans/Lines of Credit Secured by Junior Lien on a single 1- to 4-Family Residential Property |
| AR | AS | All Other (Non-Commercial) Real Estate Loans/Lines of Credit |

| Loan Balance Column | Amount Expected to Be Collected Column | Loan Portfolio Segment Type |
|---|---|---|
| AV | AW | Commercial Loans/Lines of Credit Real Estate Secured |
| AZ | BA | Commercial Loans/Lines of Credit Not Real Estate Secured |

***Note:*** *If more rows are needed, right click the whole row at Row 23 or above and chose Insert Row Above to ensure loan information is captured by the CECL Tool*.

See Figure 3.3 of the Appendix for a visual depiction of how to populate these fields in the CECL Tool.

## 2.6 Tab 4—Adjustments: Qualitative Adjustments

The CECL Tool has functionality to adjust the initial net charge-off rate and WARM factor values that are used to calculate the ACL on Tab 4. In general, qualitative adjustments are used to add the values or estimates that are missing from the quantitative values.

Credit unions use qualitative adjustments to calibrate and refine both the charge-off rates and the WARM factors. The qualitative adjustments work as an addition to or subtraction from the original value. For example, if an economic recession is expected, the historical charge-off rate is increased to include expected losses that are not included in the original charge-off rate. The original charge-off rate may not cover a period of an entire business cycle, which includes a recession. Also, if higher than historical inflation continues, the WARM factor is increased to adjust for the slowing of prepayments. Due to higher inflation and increased borrowing rates, debtors will likely slow down refinancing or paying off their loans early.

The CECL accounting standard recognizes that qualitative adjustments are expected when the starting point for determining credit losses is the historical net charge-off rates, such as with the WARM methodology.

> "An entity shall not rely solely on past events to estimate expected credit losses. When an entity uses historical loss information, it shall consider the need to adjust historical information to reflect the extent to which management expects current conditions and reasonable and supportable forecasts to differ from the conditions that existed for the period over which historical information was evaluated." (ASC 326-20-30-9)

If utilized, enter the following.

**Column B: Loss Rate Adjustment for Qualitative Factors**

Enter the adjustments to the historical net charge-off rate, per loan portfolio segment into this column.

**Column C: Justification for Loss Rate Adjustment**

Enter the qualitative factors used to justify the net charge-off rate adjustment figure in Column B, along with a short description of the reasoning. Separately from the CECL Tool, prepare documentation that supports and justifies the qualitative adjustment. The list of qualitative factors that might justify a need for adjustments is provided on this tab. Also, see the FAQ document for additional guidance around calculating qualitative adjustments.

**Column D: WARM Adjustment**

Enter the adjustments to the WARM factor, per loan portfolio segment into this column.

**Column E: Justification for WARM Adjustment**

Enter the qualitative factors used to justify the WARM factor adjustment figure in Column D here, along with a short description of the reasoning. Separately from the CECL Tool, prepare documentation that supports and justifies the qualitative factors. The list of qualitative factors that might justify a need for adjustments is provided on this tab. Also, see the FAQ document for additional guidance on calculating qualitative adjustments.

See Figure 3.4 of the Appendix for a visual depiction of how to populate these fields in the CECL Tool.

## 2.7 Tab 1—Summary: Total Estimated Credit Losses

Tab 1 is a read-only Excel sheet that contains the model's output, credit losses for individually evaluated loans and pooled loans by loan portfolio segment. Please review the outputs on this tab for reasonableness as well as unintuitive outcomes.

The overall results of this Tab, Total Estimated Loss on Total Loans and Leases, must match the Allowance for Credit Losses on Loans and Leases, Call Report account AS0048.

**Column E: Total Estimated Loss**

Values in this column are the ACL outputs for each loan portfolio segment. The values are the total of the estimated credit losses on individually evaluated loans (column B) and of the estimated credit losses on pooled loan evaluated under the WARM methodology (column C). The total of all the loan portfolio segments (Cell E16) is the Allowance for Credit Losses on Loans and Leases, Call Report account AS0048.

**Column F: Reserve Ratio**

Contains the ACL Reserve Ratio on each loan portfolio segment as well as on the total of all loan portfolio segments.

See Figure 3.5 of the Appendix for a visual depiction of this tab in the CECL Tool.

## 2.8 Tab 3—Pooled Basis: WARM Application

Tab 3 is a read-only Microsoft Excel sheet that shows the application on the WARM methodology on each loan portfolio segment. The CECL Tool calculates the ACL for a loan portfolio segment (column Q) by multiplying the period-end loan portfolio balance, the average annual charge-off rate, and the WARM factor. Please review the additional outputs on this tab for reasonableness and unintuitive outcomes. To facilitate the analysis, ACL value per loan portfolio segment is separated by the quantitative portion (column O) and qualitative portion (column P).

As noted in section 2.6, the CECL accounting standard requires the consideration of qualitative adjustments. Under the previous methodology for determining the allowance for loan and lease losses, which was the incurred loss methodology, qualitative adjustments were made to the allowance for loan and lease losses by credit union management to consider the current economic environment as well as default risk of members and loan products. The same concept continues with CECL.

**Column G: Historical Loss Rate**

Contains the historical loss rate per loan portfolio segment. This figure is individualized by credit union based on the weighted average 3-year net charge off rate. The value is calculated from Call Report data.

**Column H: Loss Rate Adjustment for Qualitative Factors**

Contains the qualitative adjustment provided by the user in Tab 4.

**Column I: Applicable Loss Rate on Pooled Basis**

Sum of Column G and Column H.

**Column K: Weighted Average of Remaining Maturity**

Contains the WARM factor per loan portfolio segment. The NCUA provides this WARM factor, which is based on loan portfolio data for peer credit unions (See the FAQs for additional discussion on the WARM factor).

**Column L: Adjustment to WARM**

Contains the qualitative adjustment provided by the user in Tab 4.

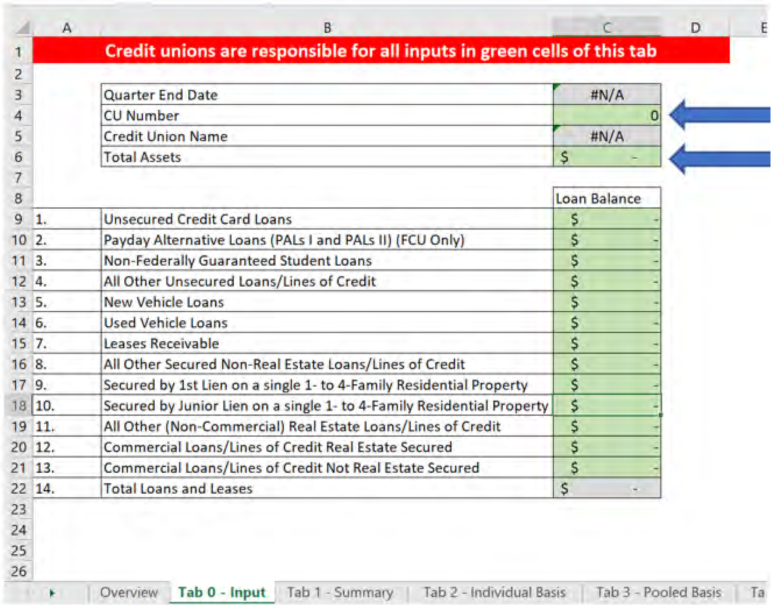
**Column M: Applicable WARM**
Sum of Column K and Column L.

**Column Q: Combined CECL Pooled Lifetime Loss**
This value is calculated by multiplying Column E, Column I, and Column M. This column's output is also shown on the Summary Tab.

See Figure 3.6 of the Appendix for a visual depiction of this tab in the CECL Tool.

# 3.0 Appendix

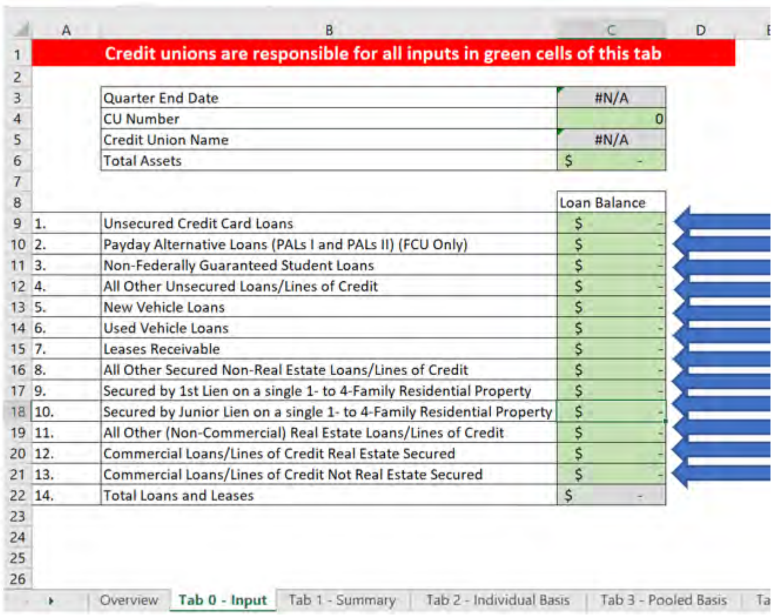
**Figure 3.1: Tab 0 Inputs—Enter Charter Number and Total Assets**



| | A | B | C |
|---|---|---|---|
| 1 | Credit unions are responsible for all inputs in green cells of this tab | | |
| 2 | | | |
| 3 | | Quarter End Date | #N/A |
| 4 | | CU Number | 0 |
| 5 | | Credit Union Name | #N/A |
| 6 | | Total Assets | $ - |
| 7 | | | |
| 8 | | | Loan Balance |
| 9 | 1. | Unsecured Credit Card Loans | $ - |
| 10 | 2. | Payday Alternative Loans (PALs I and PALs II) (FCU Only) | $ - |
| 11 | 3. | Non-Federally Guaranteed Student Loans | $ - |
| 12 | 4. | All Other Unsecured Loans/Lines of Credit | $ - |
| 13 | 5. | New Vehicle Loans | $ - |
| 14 | 6. | Used Vehicle Loans | $ - |
| 15 | 7. | Leases Receivable | $ - |
| 16 | 8. | All Other Secured Non-Real Estate Loans/Lines of Credit | $ - |
| 17 | 9. | Secured by 1st Lien on a single 1- to 4-Family Residential Property | $ - |
| 18 | 10. | Secured by Junior Lien on a single 1- to 4-Family Residential Property | $ - |
| 19 | 11. | All Other (Non-Commercial) Real Estate Loans/Lines of Credit | $ - |
| 20 | 12. | Commercial Loans/Lines of Credit Real Estate Secured | $ - |
| 21 | 13. | Commercial Loans/Lines of Credit Not Real Estate Secured | $ - |
| 22 | 14. | Total Loans and Leases | $ - |



**Figure 3.2 Tab 0 Inputs—Enter Loan Portfolio Segment Balances**



| | A | B | C |
|---|---|---|---|
| 1 | Credit unions are responsible for all inputs in green cells of this tab | | |
| 2 | | | |
| 3 | | Quarter End Date | #N/A |
| 4 | | CU Number | 0 |
| 5 | | Credit Union Name | #N/A |
| 6 | | Total Assets | $ - |
| 7 | | | |
| 8 | | | Loan Balance |
| 9 | 1. | Unsecured Credit Card Loans | $ - |
| 10 | 2. | Payday Alternative Loans (PALs I and PALs II) (FCU Only) | $ - |
| 11 | 3. | Non-Federally Guaranteed Student Loans | $ - |
| 12 | 4. | All Other Unsecured Loans/Lines of Credit | $ - |
| 13 | 5. | New Vehicle Loans | $ - |
| 14 | 6. | Used Vehicle Loans | $ - |
| 15 | 7. | Leases Receivable | $ - |
| 16 | 8. | All Other Secured Non-Real Estate Loans/Lines of Credit | $ - |
| 17 | 9. | Secured by 1st Lien on a single 1- to 4-Family Residential Property | $ - |
| 18 | 10. | Secured by Junior Lien on a single 1- to 4-Family Residential Property | $ - |
| 19 | 11. | All Other (Non-Commercial) Real Estate Loans/Lines of Credit | $ - |
| 20 | 12. | Commercial Loans/Lines of Credit Real Estate Secured | $ - |
| 21 | 13. | Commercial Loans/Lines of Credit Not Real Estate Secured | $ - |
| 22 | 14. | Total Loans and Leases | $ - |

**Figure 3.3: Tab 2 Inputs—Individual Basis Loan Data Population**

Credit unions are responsible for all inputs in green cells of this tab

| A | B | C | D | E | F | G | H | I | J |
|---|---|---|---|---|---|---|---|---|---|
| | | | Unsecured Credit Card Loans | | | | Payday Alternative Loans | | |
| Borrower/ Member Name | Note Number(s) | | Loan Balance | Amount Expected to be Collected | CECL ACL | | Loan Balance | Amount Expected to be Collected | CECL ACL |
| John Doe | 1000-2043 | | 25000 | 10000 | 15000 | | | | 0 |
| John Doe | 1000-2044 | | | | 0 | | 6000 | 4500 | 1500 |

**Figure 3.4: Tab 4 Inputs—Adjustments to Loan Data Population**

Credit unions are responsible for all inputs in green cells of this tab

| Loan Balance by Portfolio Segment (Must Correspond to Call Report Page 3) | Loss Rate Adjustment for Qualitative Factors | Justification for Loss Rate Adjustment | Adjustment to WARM | Justification for WARM adjustment |
|---|---|---|---|---|
| Unsecured Credit Card Loans [1] | 1.00% | | 0 | |
| Payday Alternative Loans [2] | 0.00% | | 0 | |
| Non-Federally Guaranteed Student Loans [3] | 0.00% | | 0 | |
| New Vehicle Loans [4] | 0.00% | | 0 | |
| Used Vehicle Loans [5] | 0.00% | | 0 | |
| Leases Receivable [6] | 0.00% | | 0 | |
| Real Estate Secured Consumer Loans [7] | 0.00% | | 0 | |
| Commercial Loans/Lines of Credit Real Estate Secured [8] | 0.00% | | 0 | |
| Commercial Loans/Lines of Credit Not Real Estate Secured [9] | 0.00% | | 0 | |
| All Other Loans [10] | 0.00% | | 0 | |
| Average | [illegible] | | [illegible] | |

**Qualitative Factors**
(Q-Factors from 2020 IPS and ASC 326-20-55-4)
Select generic examples of events that may justify a need for adjustments*
(a) Trends in nature and volume of financial assets
(b) Existence and effect of any concentrations of credit
(c) Volume and severity of past due financial assets
(d) Changes in value of underlying collateral
(e) Changes in lending strategies - policies & procedures
(f) Quality of credit review function
(g) Experience, ability, and depth of lending staff
(h) External Factors - competition, technology, natural disasters
(i) Changes to the general market condition of local area
(j) Changes to local business conditions
*Note: These generic examples of events, in and of itself, are inadequate justification for adjustments

**Figure 3.5: Tab 1 Summary—Outputs**

All values in this tab are automatically filled.

| Instructions -> | | From Tab 2 (Last Row) | From Tab 3 (Column N) | Calculated | Calculated |
|---|---|---|---|---|---|
| | A | B | C | D = B + C | E = D / A |
| Loan Portfolio Segment | Loan Balance | Loss Assessed on Individual Basis | Loss Assessed on Pooled Basis | Total Estimated Loss | Reserve Ratio |
| Unsecured Credit Card Loans [1] | $ 10,000 | $ - | $ 171 | $ 171 | 1.71% |
| Payday Alternative Loans [2] | $ 250,000 | $ - | $ 13,203 | $ 13,203 | 5.28% |
| Non-Federally Guaranteed Student Loans [3] | $ 3 | $ - | $ - | $ - | 0.00% |
| New Vehicle Loans [4] | $ 120,000 | $ - | $ 1,424 | $ 1,424 | 1.19% |
| Used Vehicle Loans [5] | $ 6 | $ - | $ 0 | $ 0 | 0.99% |
| Leases Receivable [6] | $ 7 | $ - | $ - | $ - | 0.00% |
| Real Estate Secured Consumer Loans [7] | $ 30 | $ - | $ (0) | $ (0) | -0.02% |
| Commercial Loans/Lines of Credit Real Estate Secured [8] | $ 12 | $ - | $ 0 | $ 0 | 1.05% |
| Commercial Loans/Lines of Credit Not Real Estate Secured [9] | $ 13 | $ - | $ (0) | $ (0) | -0.34% |
| All Other Loans [10] | $ 12 | $ - | $ 0 | $ 0 | 2.98% |
| Total Loans and Leases [11] | $ 380,083 | $ - | $ 14,798 | $ 14,798 | 3.89% |

Figure 3.6: Tab 3 Pooled Basis—Outputs

All values in this tab are automatically filled.

| Instructions -> | Call Report Data | From Tab 2 (Last Row) | Calculated | Weighted average 3 year Net Chargeoff rate using Call Report data | From Tab 4 (Column B) | Calculated | WARM | From Tab 4 (Column D) | Calculated | Calculated |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C = A - B | D | E | F = D + E | G | H | I = G + H | C*F*I |
| **Loan Balance by Portfolio Segment** (Must Correspond to Call Report Page 6) | **Loan Balance** | **Loans Assesed on Individual Basis** | **Pooled Balance** | **Historical Loss Rate** | **Loss Rate Adjustment for Qualitative Factors** | **Appplicable Loss Rate on Pooled Basis** | **Peer Weighted Average Maturity** | **Adjustment to WARM** | **Applicable WARM** | **CECL Pooled Lifetime Loss** |
| Unsecured Credit Card Loans [1] | $ 10,000 | $ - | $ 10,000 | 0.71% | 1.00% | 1.71% | 1.00 | 0.00 | 1.0 | $ 17 |
| Payday Alternative Loans [2] | $ 250,000 | $ - | $ 250,000 | 5.28% | 0.00% | 5.28% | 1.00 | 0.00 | 1.0 | $ 13,20 |
| Non-Federally Guaranteed Student Loans [3] | $ 3 | $ - | $ 3 | 0.00% | 0.00% | 0.00% | 7.75 | 0.00 | 7.7 | $ - |
| New Vehicle Loans [4] | $ 120,000 | $ - | $ 120,000 | 0.33% | 0.00% | 0.33% | 3.63 | 0.00 | 3.6 | $ 1,424 |
| Used Vehicle Loans [5] | $ 6 | $ - | $ 6 | 0.30% | 0.00% | 0.30% | 3.29 | 0.00 | 3.2 | $ 0 |
| Leases Receivable [6] | $ 7 | $ - | $ 7 | 0.00% | 0.00% | 0.00% | 1.00 | 0.00 | 1.0 | $ - |
| Real Estate Secured Consumer Loans [7] | $ 30 | $ - | $ 30 | 0.00% | 0.00% | 0.00% | 8.34 | 0.00 | 8.3 | $ (0 |
| Commercial Loans/Lines of Credit Real Estate Secured [8] | $ 12 | $ - | $ 12 | 0.13% | 0.00% | 0.13% | 8.34 | 0.00 | 8.3 | $ 0 |
| Commercial Loans/Lines of Credit Not Real Estate Secured [9] | $ 13 | $ - | $ 13 | -0.08% | 0.00% | -0.08% | 4.31 | 0.00 | 4.3 | $ (0 |
| All Other Loans [10] | $ 12 | $ - | $ 12 | 0.79% | 0.00% | 0.79% | 3.77 | 0.00 | 3.7 | $ 0 |
| Total Loans and Leases [11] | $ 380,083 | | | | | | | | | $ 14,79 |