

## Expected Loss Estimator Tool Background and Instructions

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### Overview

The Federal Reserve System developed the Expected Loss Estimator (ELE) tool to support the implementation of the current expected credit losses (CECL) methodology for community financial institutions (“financial institutions” or “institutions”). The ELE tool provides automated calculations using the Weighted Average Remaining Maturity (WARM) method,<sup>1</sup> one of many CECL methods accepted by the Financial Accounting Standards Board (FASB). A financial institution’s management is ultimately responsible for determining whether this approach is appropriate given their unique facts and circumstances.

This document sets forth how to use the ELE tool that implements the WARM method, including step-by-step instructions for the user.

### Disclaimer

The ELE tool should be used with appropriate caution. By using the ELE tool and any updates, you assume all risks related to your use of the ELE tool, including risks related to data and assumptions you input and any modifications you make to the ELE tool. **The Federal Reserve is providing the ELE tool “as is” and the Federal Reserve expressly disclaims all warranties, express or implied, including any implied warranties of merchantability and fitness for a particular purpose.** In no event will the Federal Reserve be liable to you or to any third party for any direct, indirect, incidental, consequential, special, or exemplary damages or lost profit related to an institution’s use of the ELE tool. Users may not use or modify the ELE tool and then present it as official government material.

The ELE tool may or may not be appropriate for any particular financial institution, and utilizing the ELE tool does not by itself ensure compliance with U.S. generally accepted accounting principles (GAAP) or any other requirement. Each institution’s management remains solely responsible for selecting and implementing an appropriate method to calculate the institution’s Allowance for Credit Losses (ACLs) and thus may utilize a different method for estimating its ACLs. The selected method(s) should be appropriate for the financial assets being evaluated, consistent with the institution’s size and complexity and should be well documented, with clear explanations of the supporting analyses and rationale. Each institution’s management should also ensure that the institution’s ACLs conforms to GAAP and adequately covers credit risk.

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<sup>1</sup> See [FASB Staff Q&A—Topic 326, No. 1: \*Whether the Weighted-Average Remaining Maturity Method Is an Acceptable Method to Estimate Expected Credit Losses\*](#) (referred to as “FASB Staff Q&A” in this document).

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### Background

In June 2016, the FASB issued a new accounting standard, ASC Topic 326,<sup>2</sup> that introduces the CECL methodology for estimating the ACLs. CECL was developed to be operationally scalable and flexible.

ASC Topic 326 requires entities to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts over the contractual term of its financial assets, considering expected prepayments. The standard does not require a specific credit loss method ; it allows entities to use judgment in determining the relevant information and estimation methods that are appropriate for their circumstances.

As discussed in the [FASB Staff Q&A](#), the WARM method may be appropriate to estimate an ACLs for less complex financial asset pools. The WARM method uses an average annual charge-off rate and remaining life to estimate the ACLs. The average annual charge-off rate contains losses over several vintages and is used as a foundation for estimating the credit losses for the remaining balances of financial assets in an asset pool as of the balance sheet date. The average annual charge-off rate is applied to the contractual term, further adjusted for estimated prepayments to determine the unadjusted historical charge-off rate for the remaining balance of the financial assets. The calculation of the unadjusted historical charge-off rate does not include a reasonable and supportable forecast period. Like other loss rate methods that can be used to estimate expected credit losses, consideration of reasonable and supportable forecasts when applying the WARM method can be accomplished in other ways such as a qualitative approach.

### About the ELE Tool

The ELE tool is an Excel-based tool that automates the WARM method developed using the Visual Basic for Applications (VBA) programming language. The tool takes loan-level data and management assumptions provided by the institution as inputs and automates the WARM method related calculations as described in the [FASB Staff Q&A](#). Financial institutions may layer on qualitative adjustments as deemed necessary by their management into the ELE tool to arrive at the final ACLs.

The ELE tool can be used as either a primary tool in the ACLs calculation or as a supplementary tool to existing CECL process. This tool provides fully viewable code and formulas to allow financial institutions to independently verify the ELE tool and adjust as deemed necessary by their management.

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<sup>2</sup> See [FASB Accounting Standards Update 2016-13: \*Financial Instruments – Credit Losses \(Topic 326\): Measurement of Credit Losses on Financial Instruments\*](#).

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### Getting Started

- Read the Disclaimer and Background sections above which summarize important information about the intended use and context of the ELE tool.
- Open the data file from your institution and the ELE tool. Click the “Enable Content” button after opening the tool.

The remainder of this document provides step-by-step instructions on how to use the ELE tool. Each section includes illustrated steps for additional reference.

There are 13 steps organized into the following four sections:

- I. Input Data into the ELE Tool (steps 1-3)
- II. Prepare Data for Allowance Calculation (steps 4-8)
- III. Enter Assumptions and Calculate Allowance (steps 9-10)
- IV. Review Allowance Calculation (step 11-13)

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### I. Input Loan Data into the ELE Tool

To start, financial institutions prepares a loan file with six required data fields (refer to Appendix – Parameter Reference Table for descriptions of these fields): portfolio, loan number, outstanding balance, annualized interest rate, maturity date, and amortization date. This data is generally readily available in the financial institution’s loan portfolio management platform and required for the Interagency Loan Data Request (ILDR) except for the amortization date. For definition of the amortization date refer to the Appendix.

Based on the portfolio names provided by the financial institutions, loans are pooled into distinct portfolios and processed in the ELE tool. Loans in the same portfolio are expected to have the same payment frequency and amortization type and similar risk characteristics. The tool is limited to 25 portfolios. If more than 25 portfolios are required, create separate ELE tool workbooks to accommodate additional portfolios.

Follow steps 1 through 3 below in order.

1. Go to the “loan data” tab of the ELE tool.
2. Identify the six column headers in the first row (columns A-F) that correspond to your institution’s loan data file. Refer to the Appendix for additional information on these six required data fields.
3. Copy data from your institution’s data file for each of the six corresponding column headers and paste under the appropriate headers of the “loan data” tab.

Steps 1 through 3 above are illustrated below.

	A	B	C	D	E	F
1	Portfolio	Loan Number	Outstanding Balance	Annualized Interest Rate	Maturity Date	Amortization Date
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
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19						
20						
21						
22						
23						
24						
25						
26						
27						

1) Select this tab

2) Identify these six column headers in your data file

3) Paste under each appropriate column beginning in Row 2

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### II. Prepare Data for Allowance Calculation

The ELE tool has a few built-in data validation checks that will be applied to the financial institution's imported loan data. Financial institutions should perform additional data validation as deemed necessary by management.

Validation steps remove loans with any of the following characteristics:

- Maturity date prior to the "As of Date" (cell C5 of the "inputs" tab)
- Zero or negative loan balances
- Annualized Interest Rates greater than 100%
- Maturity or amortization date greater than 50 years from the "As of Date"
- Missing required information (portfolio, outstanding balance, annualized interest rate, maturity date, and amortization date)

Follow steps 4 through 8 below, which should be performed in order.

4. Go to the "inputs" tab of the ELE tool.
5. Enter an "As of Date" in cell C5 that represents the beginning period from which lifetime credit losses will be projected for each portfolio.
6. Click the "Validate Loan Data" button which will perform limited validation of the data from your institution. This process typically takes less than 30 seconds.
7. Users will be notified of any problematic data with a message box when the tool identifies problems with the data. Click "OK" to continue. This data will be deleted from the loan data tab and moved to a new tab labeled "problematic data" and portfolio names will populate automatically on the "inputs" tab. Proceed to step 8 to correct the "problematic data." As noted previously, the tool can handle up to 25 different portfolios at one time, if there are more than 25 portfolios, an error message will pop up as well.
8. Problematic data for loans in the "problematic data" tab will need to be corrected to be included in the allowance calculation. The data flagged as problematic on the "problematic data" tab will be highlighted. Make the necessary corrections for each problematic loan and then cut and paste the corrected data to the bottom of the "loan data" tab. Repeat steps 6 through 8 as necessary.

Steps 4 through 8 above are illustrated below (zoom in if having trouble viewing).

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**USER SUPPLIED PARAMETERS -- PRELIMINARY VALUES**

As Of Date: 1/15/2022

**VALIDATE LOAN DATA**      **CALCULATE ALLOWANCE**

Portfolio Number	Portfolio Name	Annualized Loss Rate	Annualized Prepayment Rate	Amortization Periodicity (# of payments per year)	Amortization Type (0 = no amort, 1 = use maturity date, 2 = use amortization date)
1	Ag				
2	C&I				
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
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19					
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21					
22					
23					
24					
25					

Warning--there are issues with some of the observations in the 'loan data' sheet. These have been removed and placed on the 'problematic data' sheet

OK

background | **inputs** | outputs | loan data | **problematic data** | +

	A	B	C	D	E	F	G
1	Portfolio	Loan Number	Outstanding Balance	Annualized Interest Rate	Maturity Date	Amortization Date	
2	Ag	100015	50000	1.03	2/28/2037	2/28/2037	
3	C&I	200016	0	0.1	2/28/2038	2/28/2038	
4	C&I	200020	100000	0.1	2/28/2092	2/28/2092	
5							
6							
7							
8							
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12							
13							
14							
15							

background | inputs | outputs | loan data | **problematic data** | +

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### III. Enter Assumptions and Calculate Allowance

The users now enter their own assumptions necessary for the ELE tool to project an allowance for each portfolio. These assumptions include annualized loss rate, annualized prepayment rate (optional), payment frequency, and amortization type. Annualized loss rate and annualized prepayment rate should be reasonable estimates supported by the institution's data.<sup>3</sup> Refer to the Appendix for definitions and additional information about each assumption.

After the user enters these assumptions, the allowance can be calculated. The tool aggregates the loans in each portfolio and generates a payment schedule for the portfolio. The loss for each period is calculated as the beginning balance minus scheduled principal payments and prepayments times the annualized loss rate. The ending balance for each period is calculated as the beginning balance minus scheduled principal payments, prepayments, and projected losses.

Follow steps 9 through 10 below in order.

9. Enter values for the four assumptions on the “inputs” tab to the right of “Portfolio Name.”
10. Confirm all assumptions are entered for each portfolio where appropriate and then click the “Calculate Allowance” button. The calculation process may take a few minutes to complete if portfolios have long payment periods. Once complete, the results will populate in the “outputs” tab and each portfolio will populate its own new tab.

Steps 9 through 10 above are illustrated below.

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<sup>3</sup> Users of the ELE tool may choose to consider testing a range of assumptions to help inform their choices for those eventual values.

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8	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Portfolio Number</th> <th style="width: 20%;">Portfolio Name</th> <th style="width: 15%;">Annualized Loss Rate</th> <th style="width: 15%;">Annualized Prepayment Rate</th> <th style="width: 15%;">Amortization Periodicity (# of payments per year)</th> <th style="width: 25%;">Amortization Type (0 = no amort, 1 = use maturity date, 2 = use amortization date)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Ag</td> <td style="border: 2px solid red;">0.50%</td> <td style="border: 2px solid red;">2.00%</td> <td style="border: 2px solid red;">12</td> <td style="border: 2px solid red;">1</td> </tr> <tr> <td>2</td> <td>C&amp;I</td> <td style="border: 2px solid red;">1.00%</td> <td style="border: 2px solid red;">1.00%</td> <td style="border: 2px solid red;">4</td> <td style="border: 2px solid red;">1</td> </tr> <tr><td>3</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>4</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>5</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>6</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>7</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>8</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>9</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>10</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>11</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>12</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>13</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>14</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>15</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>16</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>17</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>18</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>19</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>20</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>21</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>22</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>23</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>24</td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td>25</td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>								Portfolio Number	Portfolio Name	Annualized Loss Rate	Annualized Prepayment Rate	Amortization Periodicity (# of payments per year)	Amortization Type (0 = no amort, 1 = use maturity date, 2 = use amortization date)	1	Ag	0.50%	2.00%	12	1	2	C&I	1.00%	1.00%	4	1	3						4						5						6						7						8						9						10						11						12						13						14						15						16						17						18						19						20						21						22						23						24						25					
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9) Enter assumptions

10) Click Calculate Allowance

background
inputs
outputs
loan data
problematic data
+

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### IV. Review Allowance Calculation and Enter Qualitative Adjustments

Projected ACLs are summarized by portfolio, and the “outputs” tab provides the total. Additional portfolio specific details are available in separate portfolio tabs with the number corresponding to the portfolio number in the “outputs” tab. Review the outputs and make qualitative adjustments as deemed necessary by management.

Follow steps 11 through 13 below in order.

11. Go to the “outputs” tab of the ELE tool. There are two tables: the left table (salmon-colored) shows the FINAL values of the inputs, which are the same values as the “inputs” tab unless manual adjustments (See step 13A below) are made in the portfolio tabs. The right table (green-colored) shows the outputs for each portfolio. The total allowance for all portfolios is directly above the outputs table.
12. Users have the option to adjust the loss rate up or down for each portfolio by entering a positive or negative value, respectively, into the “Qualitative Loss Rate Adjustment” (column O) shaded in blue. The qualitative adjustments on the outputs may reflect management’s judgments or forecasts and should be supported and documented.
13. Users can make additional adjustments to the inputs of the projected allowance calculation for each portfolio within portfolio specific tabs. The two inputs that can be adjusted in the portfolio specific tabs are annualized loss rate and annualized prepayment rate.

Steps 11 through 13 are illustrated below (zoom in if having trouble viewing).

The screenshot displays the 'PROJECTION PARAMETERS - FINAL VALUES' and 'PROJECTION RESULTS' sections of the tool. The 'As Of Date' is 01/15/2022. The 'TOTAL ALLOWANCE' is \$122,454.

PROJECTION PARAMETERS - FINAL VALUES						PROJECTION RESULTS							
Inputs						Outputs							
Portfolio Number	Portfolio Name	Annualized Loss Rate	Annualized Prepayment Rate	Amortization Periodicity (# of payments per year)	Amortization Type (0 = no amort, 1 = use maturity date, 2 = use amortization date)	Portfolio Number	Portfolio Name	Total Outstanding Balance	Total Projected Losses	Projected Lifetime Loss Rate	Qualitative Loss Rate Adjustment	Loss Rate + Qualitative Adjustment	Final Allowance for Credit Losses
1	Ag	0.500%	2.000%	12	1	1	Ag	\$1,000,000	\$24,380	2.44%	0.00%	2.44%	\$24,380
2	C&I	1.000%	1.000%	4	1	2	C&I	\$1,500,000	\$98,074	6.54%	0.00%	6.54%	\$98,074

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Specifically, in Step 13, additional adjustments can be made in two ways:

- A. The table on the left side of the “portfolio” tab includes “User Supplied Parameters” and “Summary Stats” where users can make additional adjustments to parameters (blue-colored) and review key statistics (salmon-colored).

Updates made to parameters in “portfolio” tabs do not update the values originally in the “inputs” tab. Instead, they are reflected in the left table of the “outputs” tab in step 11 which displays the FINAL value of inputs.

- B. The table on the right side of the “portfolio” tab shows a detailed amortization schedule along with some key values. The columns with values highlighted in blue allow users to enter different annualized prepayment rate (column M) and annualized loss rate (column Q) by projected period, which will automatically update the allowance calculation in column R , Summary Stats in column C in the “portfolio” tab as well as column Q in the “outputs” tab.

**DO NOT** click the “Calculate Allowance” button in the “inputs” tab again after making the adjustments on the “portfolio” tab. The calculation will automatically update within the tool when changes are made on the “portfolio” tab.

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Step 13 A and B in the “portfolio” tab are illustrated below (zoom in if having trouble viewing).

	A	B	C	D
1		<b>User Supplied Parameters</b>	<b>Value</b>	
2				
3	A)	Portfolio Category	Ag	
4		Annualized Loss Rate (static)	0.900%	
5		Annualized Prepayment Rate (static)	2.000%	
6		Amortization Type	1	
7		(0=none, 1=maturity date, 2=amortization date)		
8				
9				
10		<b>Summary Stats</b>	<b>Value</b>	
11		Wgtd Avg Contractual Life (years)	10.63	
12		Wgtd Avg Amortized Life (years)	10.63	
13		Wgtd Avg Interest Rate	3.00%	
14		Total Outstanding Balance	\$1,000,000	
15		Total Projected Losses	\$43,965	
16		Projected Lifetime Loss Rate	4.396%	
17		Term based on maturity date		
18				

	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1		Payment Period	Calendar Date	# of Amort Periods	Time Adj	Beg Balance	Principal Payment	Static PP Rate (annual)	Dynamic PP Rate (annual)	Prepayment Amount	Amortized Cost	Static LR (annual)	Dynamic LR (annual)	Allowance for Credit Loss
2	B)	0	01/15/2022	127.5369863	1	\$0	\$0	2.00%	0.00%	\$0	\$1,000,000	0.50%	0.00%	\$0
3		1	02/15/2022	127.5369863	1	\$1,000,000	\$6,667	2.00%	0.00%	\$1,682	\$991,651	0.50%	0.00%	\$414
4		2	03/15/2022	127.5369863	1	\$991,651	\$6,684	2.00%	0.00%	\$1,668	\$983,299	0.50%	0.00%	\$411
5		3	04/15/2022	127.5369863	1	\$983,299	\$6,700	2.00%	0.00%	\$1,654	\$974,945	0.50%	0.00%	\$407
6		4	05/15/2022	127.5369863	1	\$974,945	\$6,717	2.00%	0.00%	\$1,640	\$966,588	0.50%	0.00%	\$404
7		5	06/15/2022	127.5369863	1	\$966,588	\$6,734	2.00%	0.00%	\$1,626	\$958,228	0.50%	0.00%	\$400
8		6	07/15/2022	127.5369863	1	\$958,228	\$6,751	2.00%	0.00%	\$1,612	\$949,866	0.50%	0.00%	\$397
9		7	08/15/2022	127.5369863	1	\$949,866	\$6,768	2.00%	0.00%	\$1,598	\$941,500	0.50%	0.00%	\$393
10		8	09/15/2022	127.5369863	1	\$941,500	\$6,784	2.00%	0.00%	\$1,584	\$933,132	0.50%	0.00%	\$390
11		9	10/15/2022	127.5369863	1	\$933,132	\$6,801	2.00%	0.00%	\$1,570	\$924,761	0.50%	0.00%	\$386
12		10	11/15/2022	127.5369863	1	\$924,761	\$6,818	2.00%	0.00%	\$1,556	\$916,387	0.50%	0.00%	\$383
13		11	12/15/2022	127.5369863	1	\$916,387	\$6,835	2.00%	0.00%	\$1,541	\$908,010	0.50%	0.00%	\$379
14		12	01/15/2023	127.5369863	1	\$908,010	\$6,853	2.00%	0.00%	\$1,527	\$899,630	0.50%	0.00%	\$376
15		13	02/15/2023	127.5369863	1	\$899,630	\$6,870	2.00%	0.00%	\$1,513	\$891,247	0.50%	0.00%	\$372
16		14	03/15/2023	127.5369863	1	\$891,247	\$6,887	2.00%	0.00%	\$1,499	\$882,861	0.50%	0.00%	\$369
17		15	04/15/2023	127.5369863	1	\$882,861	\$6,904	2.00%	0.00%	\$1,485	\$874,472	0.50%	0.00%	\$365
18		16	05/15/2023	127.5369863	1	\$874,472	\$6,921	2.00%	0.00%	\$1,471	\$866,080	0.50%	0.00%	\$362
19		17	06/15/2023	127.5369863	1	\$866,080	\$6,939	2.00%	0.00%	\$1,457	\$857,684	0.50%	0.00%	\$358
20		18	07/15/2023	127.5369863	1	\$857,684	\$6,956	2.00%	0.00%	\$1,443	\$849,286	0.50%	0.00%	\$355
21		19	08/15/2023	127.5369863	1	\$849,286	\$6,973	2.00%	0.00%	\$1,429	\$840,884	0.50%	0.00%	\$351
22		20	09/15/2023	127.5369863	1	\$840,884	\$6,991	2.00%	0.00%	\$1,414	\$832,478	0.50%	0.00%	\$348
23		21	10/15/2023	127.5369863	1	\$832,478	\$7,008	2.00%	0.00%	\$1,400	\$824,070	0.50%	0.00%	\$344

## Expected Loss Estimator Tool Background and Instructions

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### Appendix – Data Reference Table

Data Name	Data Location	Data Description
Portfolio	Loan Data tab Column A	The portfolio includes a pool of loans that are expected to have the same payment frequency, amortization type, and similar risk characteristics. This loan data is <u>required</u> in the ELE tool calculation.
Loan Number	Loan Data tab Column B	The loan number is for user tracking purposes within the tool and is not used in the calculation. This loan data is optional and not required in the ELE tool calculation.
Outstanding Balance <sup>4</sup>	Loan Data tab Column C	The outstanding balance is the loan principal balance as of the date of the calculation. This loan data is <u>required</u> in the ELE tool calculation.
Annualized Interest Rate	Loan Data tab Column D	The annualized interest rate is the annual stated interest rate for a loan. This loan data is <u>required</u> in the ELE tool calculation.
Maturity Date	Loan Data tab Column E	The maturity date is the date when the final contractual principal payment is due on the loan. This loan data is <u>required</u> in the ELE tool calculation.
Amortization Date	Loan Data tab Column F	The amortization date, if different from the maturity date, is the date over which the principal balance will be amortized. For instance, the amortization date may be different from the maturity date for commercial

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<sup>4</sup>For simplicity, the ELE tool uses outstanding principal balances as an input data. As CECL allowance is estimated over the *amortized cost basis* of financial instruments, management should determine if there is a material difference between the outstanding balance and amortized cost basis that may warrant an adjustment. As defined in the FASB master glossary, the amortized cost basis is the amount at which a financing receivable or investment is originated or acquired, adjusted for applicable accrued interest, accretion, or amortization of premium, discount, and net deferred fees or costs, collection of cash, write-offs, foreign exchange, and fair value hedge accounting adjustments.

## Expected Loss Estimator Tool Background and Instructions

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Data Name	Data Location	Data Description
		loans with a balloon payment due in year 5 with a 10-year amortization period. This loan data is <u>required</u> in the ELE tool calculation.
Annualized Loss Rate	Inputs tab Cells D12 through D26	The annualized loss rate is the percentage of annual loss rate for each portfolio. The rate of losses is static throughout the payment period horizon. This assumption is <u>required</u> in the ELE tool.
Annualized Prepay Rate	Inputs tab Cells E12 through E26	The annualized prepay rate is the percentage of loan balances prepaid annually within each portfolio. The rate of prepayment is static throughout the payment period horizon. This assumption is <u>optional</u> in the ELE tool and can be left blank.
Amortization Periodicity	Inputs tab Cells F12 through F26	The amortization periodicity is the frequency period at which payments will be made during a single year within each portfolio. For example, 12 is monthly and 4 is quarterly. This assumption is <u>required</u> in the ELE tool.
Amortization Type	Inputs tab Cells G12 through G26	The amortization type is the terms for each portfolio that will determine how allowance is calculated over the payment period horizon. Enter “0” for portfolios with <u>no assumed principal paydown</u> during the horizon, “1” for loans that will amortize according to the <u>maturity date</u> , and “2” for loans where principal paydown is made in accordance with the <u>amortization date</u> . This assumption is <u>required</u> in the ELE tool.
Weighted Average Contractual life	Portfolio tab Cell C11	The ELE tool calculates the average remaining contractual life (maturity

## Expected Loss Estimator Tool Background and Instructions

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Data Name	Data Location	Data Description
		date minus as of date), weighted by the outstanding balance.
Weighted Average Amortized life	Portfolio tab Cell C12	The ELE tool calculates the average remaining amortized life (amortization date minus as of date), weighted by the outstanding balance.
Weighted Average Interest rate	Portfolio tab Cell C12	The ELE tool calculates the average interest rate of loans in the portfolio, weighted by the outstanding balance.