

User Guide - ELS Loan Calculator Program

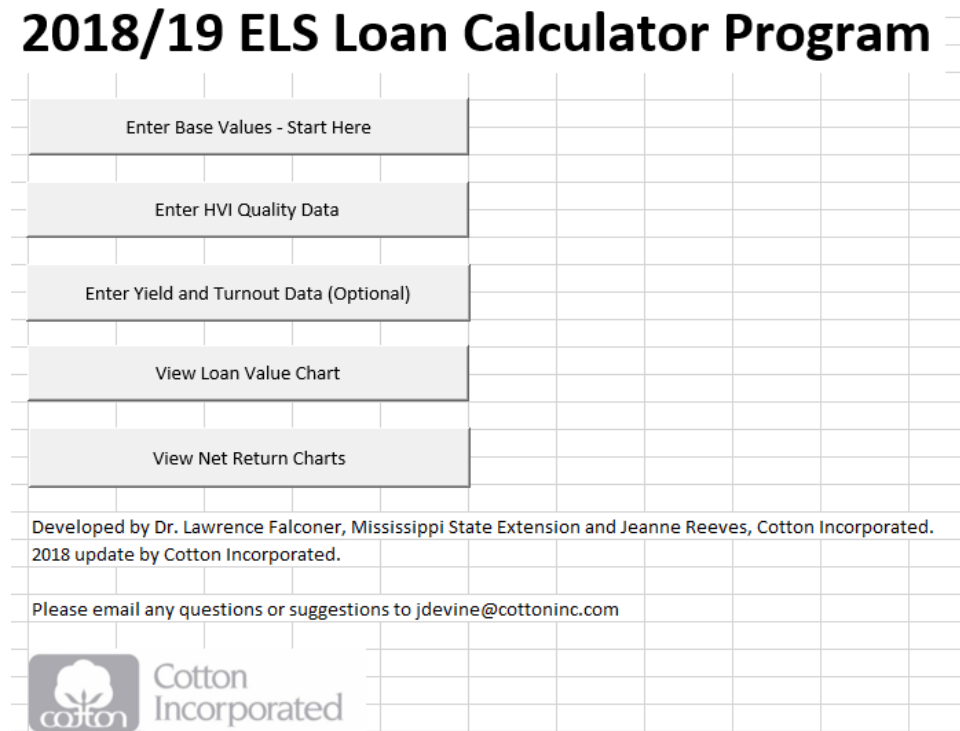
The ELS Loan Valuation Program is designed to facilitate calculation of Commodity Credit Corporation (CCC) ELS loan premium and discount values given high-volume instrument (HVI) classing information. If desired, this program has the capability to calculate net returns over harvest cost on a per acre basis. Results can be presented in both report and graphical formats. This program is primarily designed for variety test evaluations, but it can be used without modification for other applications involving calculation of ELS loan values.

The program is distributed as a Microsoft® Excel spreadsheet. **For the program to perform properly, the user must enable Macros. It should be possible to enable macros by simply clicking allow content when you open the file. If that does not work, set macro security by clicking on File (top left corner of Excel), then select Trust Center, then click on Trust Center Settings. In the Trust Center menu, click on Enable all macros, then click Ok.**

Please note that certain cells are locked to prevent formulas from being changed. If you need to unlock any of the sheets, go to Review in the Excel ribbon at the top of the book, click Unprotect sheet, and enter "cottoninc" as the password. You can also right click on the sheet tab (at bottom, e.g., HVI Quality Data) and select unprotect sheet.

Questions, comments, and suggestions are welcome. Please send an email (jdevine@cottoninc.com), we are happy to help.

Figure 1. Program Main Menu



1. Enter Base Data

The user should start by selecting the **Enter Base Values** button on the Main Menu, shown in Figure 1.

To start a new analysis, the user can click on the **Clear Sample Values** button found on the **Enter Base Data** screen to clear the spreadsheet (Figure 2). The user can also simply enter their own values in the cells with blue text.

It should be noted that additional information regarding the use of the data in the program is available in comments for each of the cells with blue text. To view the comments, simply hover the cursor over these cells. Cells with comments are indicated by a tiny red triangle in the upper right corner of the cell (see Figure 2).

In cell B6, the user specifies the title that will be printed on reports and graphs for these data.

If the user would like to generate estimates for returns, cells B8-B14 also require entries.

In cell B10, enter estimates price per ton of cottonseed (USD/ton).

In cell B12, enter the cost of harvesting in terms of USD/acre.

In cell B14, enter the cost of ginning in terms of USD/lb.

In cell B16, enter the estimated amount of seed weight in pounds per pound of lint.

Figure 2. Base Data Sheet

Enter Base Data - Start Here

	Base Values	Value Units
Study/Test Title (used in report & chart titles produced through this program)	2018/19 Sample Loan Values	n/a
Cottonseed Value (USD/ton)	185.0	USD/ton
Picking/Stripping & Moduling Cost per Cwt of Seed Cotton	3.200	USD/acre
Ginning Cost per Pound of Lint	0.120	USD/lb
Pounds of Seed per Pound of Lint	1.412	lb of seed/lb of lint
Clear Sample Values		
Restore Dummy Data		
Return to Main Menu		

2. Enter HVI Data

The user should go to the HVI Quality Data sheet to enter all the require information to calculate the CCC loan premium and discounts for ELS cotton.

Figure 3, shown below, displays an example of all the input data required for the calculation of net loan prices. “Dummy” data were entered as examples. These numbers can be cleared or restored with the buttons on this page.

Variety names can be changed in the Variety/Sample Name column.

HVI data for color, leaf, length, strength, micronaire, and extraneous matter have to be entered (cells with blue text).

All of the cells with black text will update automatically with the entry of the HVI data.

Column N gives the net change in the base loan rate due to quality differences.

Column O gives the net loan price in cents/lb (base rate plus net change due to quality differences).

Figure 3. HVI Quality Data

Enter HVI Quality Data for Each Sample

Enter HVI data in columns A to H.

Return to Main Menu **Refresh - Columns I-O**

Clear Sample Values **Note: Click the Refresh button to update/extend formulas in columns I-O to all rows with data.**

Restore Dummy Data

**Note: Staple lengths below 44 (1.375") not eligible for ELS loan.
 Note: There are no premiums/discounts for uniformity for ELS.
 Note: Extraneous matter readings are 0, 1, or 2. Blank cells for extraneous matter are treated as 0.
[link to USDA loan tables](#)**

Variety/Sample Name	Color	Leaf	Length (inches)	Strength	Mike	Extraneous Matter		Staple (32nds)	Leaf	Loan Rate	Strength	Mike	Extraneous	Net	Net
						Preparation	Other			Based on Staple, Color, &	Premium or Discount	Premium or Discount	Matter Discount	Premium or Discount	Loan Price
Variety 1	1	1	1.38	35.4	2.4	0	1	44	76.05	-1350	-1900	-715	-3965	36.40	
Variety 2	1	2	1.38	36.4	2.6	1	2	44	76.05	-1100	-1900	-1845	-4845	27.60	
Variety 3	2	3	1.40	37.4	2.8	2	0	45	72.30	-850	-1400	-1095	-3345	38.85	
Variety 4	3	4	1.40	38.4	3.1	0	1	45	67.95	0	-900	-715	-1615	51.80	
Variety 5	1	5	1.45	39.0	3.2	1	2	46	76.90	0	-900	-1845	-2745	49.45	
Variety 6	2	6	1.45	36.7	3.4	2	0	46	76.50	-850	-400	-1095	-2345	53.05	
Variety 7	3	7	1.50	37.7	3.6	0	1	48	72.05	0	0	-715	-715	64.90	
Variety 8	1	1	1.50	38.7	3.8	1	2	48	81.45	0	0	-1845	-1845	63.00	
Variety 9	2	2	1.55	39.7	4.1	2	0	50	81.15	0	0	-1095	-1095	70.20	
Variety 10	3	3	1.55	36.1	4.2	0	0	50	72.40	-1100	0	0	-1100	61.40	

3. Yield and Turnout Data

After entering the HVI data, the user can enter yield and turnout data in order to calculate estimates for net returns.

Lint Yield needs to be entered in column B.

Turnout needs to be entered in column C.

Figure 4. Yield and Turnout Data

Enter Yield and Turnout Data for Each Sample

Enter yield and turnout data in columns B & C.

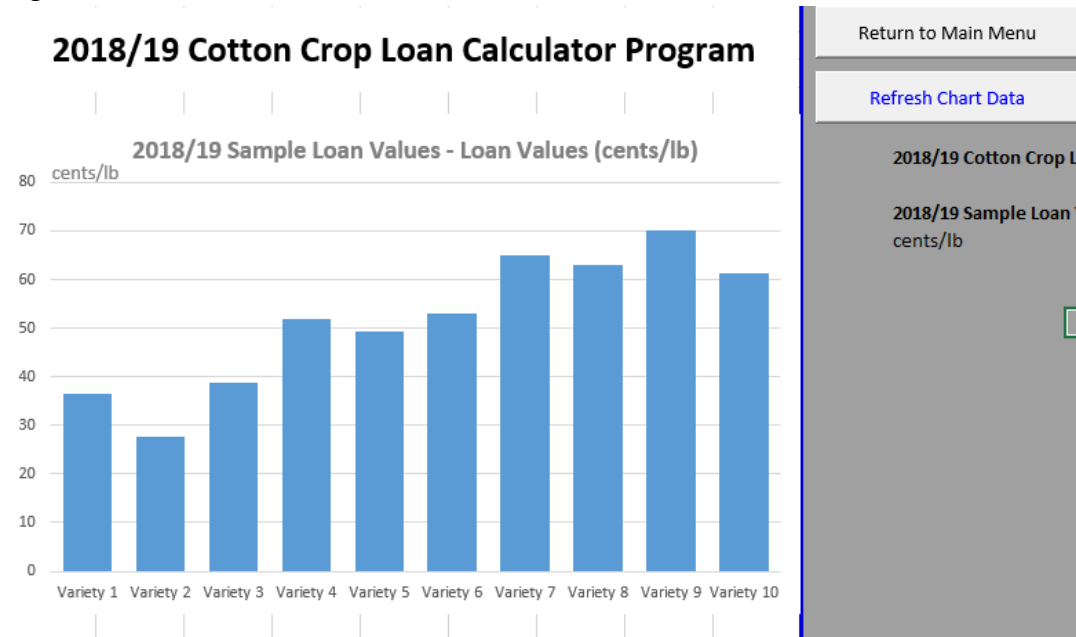
Return to Main Menu	Refresh - Columns E-J		Note: Seed yield is the product of lint yield and estimated pounds of seed per pound of lint entered on the Base Values sheet.							
Clear Sample Data	Note: Click the Refresh button to update/extend formulas in columns E-J to all rows with data.									
Restore Dummy Data										
				Estimated				Picking		
	Lint	Turnout	Lint	Seed	Seed	Gross	Picking	Ginning		Net
Variety/Sample Name	Yield	(%)	Value	Yield	Value	Return	& Moduling	Cost		Return
	(lbs/Acre)		(\$/Acre)	(lbs/Acre)	(\$/Acre)	(\$/Acre)	Cost	(\$/Acre)	(\$/Acre)	(\$/Acre)
Variety 1	615	34.5	224	868	80	304	57	74		173
Variety 2	635	34.8	175	897	83	258	58	76		124
Variety 3	655	35.3	254	925	86	340	59	79		202
Variety 4	675	35.6	350	953	88	438	61	81		296
Variety 5	695	35.9	344	981	91	435	62	83		290
Variety 6	715	36.3	379	1010	93	472	63	86		323
Variety 7	735	36.5	477	1038	96	573	64	88		421
Variety 8	755	36.7	476	1066	99	575	66	91		418
Variety 9	775	36.9	544	1094	101	645	67	93		485
Variety 10	795	37.1	488	1123	104	592	69	95		428

4. Charts

There are two sheets with charts. The range for these charts will be updated automatically when the “Refresh Chart Data” button is pushed (adds/removes rows for the data range for the charts).

The first chart sheet (Charts – Loan Value) contains only a chart of loan values.

Figure 5. Loan Value Chart



The second chart sheet (Charts – Net Return) contains loan values, lint yield, gross returns, and net returns.

Figure 6. Loan Value, Yield, Gross Return, and Net Return Charts

