How to identify potential Data Quality issues with the HMDA DF Address Field

CRA Wiz® and Fair Lending Wiz®

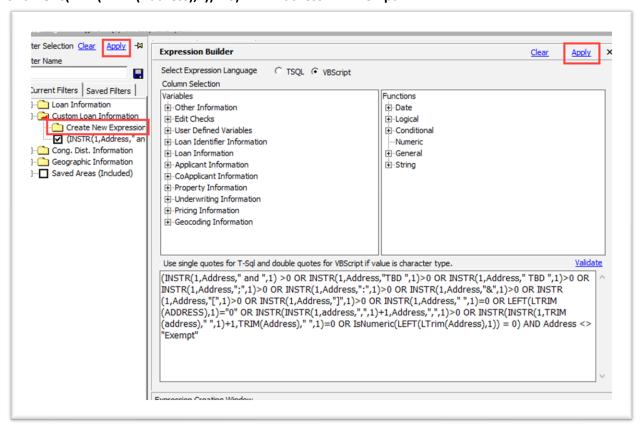
Using a Filter

A filter can be applied to identify data quality issues with the Address field. This will help identify inaccuracies, erroneous data, or to check the data quality and be used to identify records with potential issues. Please note that this may also provide false positives where no modification may be required.

To Apply a Filter

- 1. Click on Filter in the top left-corner.
- 2. Go to Custom Loan Information -> Create New Expression.
- 3. Paste the following expression into the window:

(INSTR(1,Address," and ",1) >0 OR INSTR(1,Address,"TBD ",1)>0 OR INSTR(1,Address," TBD ",1)>0 OR INSTR(1,Address,";",1)>0 OR INSTR(1,Address,";",1)>0 OR INSTR(1,Address,",1)>0 OR INSTR(1,Address,",1)>0 OR INSTR(1,Address,",1)=0 OR INSTR(1,Address,",1)=0 OR INSTR(1,Address,",1)=0 OR INSTR(1,TRIM(ADDRESS),1)="0" OR INSTR(1,TRIM(Address),",1)+1,TRIM(Address),",1)=0 OR INSTR(1,TRIM(Address),",1)+1,TRIM(Address),",1)=0 OR ISNumeric(LEFT(LTrim(Address),1))=0) AND Address <> "Exempt"





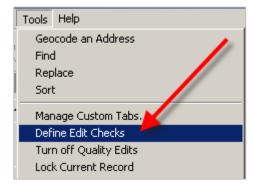
Creating and Using User Defined Edits

User Defined Edits can be an effective way to review the Address data field for inaccuracies, erroneous data, or to check the data quality. The user defined edits can be used to identify records with potential issues with the data. You can use these edits to supplement the CFPB defined edits. Please note that this method may also provide false positives where no modification may be required.

Once you build the edits, they can be used on any file.

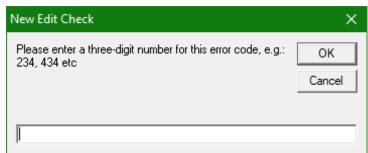
Creating User Defined Edits

- 1. Go to the Edit module.
- 2. Go to **Tools** in the file menu at the top of the program.
- 3. Click on Define Edit Checks:



The software displays the Error Check Builder window.

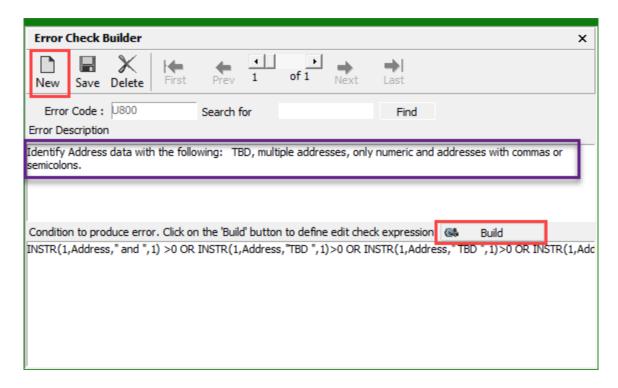
- 4. Click on **New**. It will ask for an error code.
- 5. Type in a number (Note: do not type in the "U" as the software will do that for you):



6. Include an Error Description.

Suggested Error Description: Identify address data with the following: TBD, multiple addresses, only numeric and addresses with commas, brackets, ampersand, or semicolons.

Note: The Error Description displays in the Edit Reports, so it is important to be descriptive.



9. Click on Build.

The software displays the **Expression Builder**.

Copy the following expression into the window:

(INSTR(1,Address," and ",1) >0 OR INSTR(1,Address,"TBD ",1)>0 OR INSTR(1,Address," TBD ",1)>0 OR INSTR(1,Address,";",1)>0 OR INSTR(1,Address,"&",1)>0 OR INSTR(1,Address,"&",1)>0 OR INSTR(1,Address,",1)>0 OR INSTR(1,Address,",1)>0 OR INSTR(1,Address,",1)=0 OR LEFT(LTRIM(ADDRESS),1)="0" OR INSTR(INSTR(1,address,",1)+1,Address,",1)>0 OR INSTR(INSTR(1,TRIM(address),",1)+1,TRIM(Address),",1)=0 OR INSTR(INSTR(1,TRIM(address),1))=0) AND Address <> "Exempt"

10. Click on Apply.

Note: To change edit checks, go to the **Tools** menu, select **Define Edit Checks**. Scan the User Defined Edits by clicking on **Next**, **Previous**, etc. Click on **Build** to make changes to a particular edit. Remember to edit the description if it has changed.



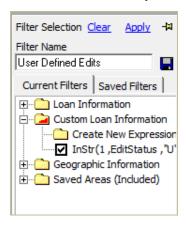
Running Edit Checks on a File

For any file you would like to run the edit checks on follow these steps:

- 1. Go to File Management.
- 2. Right-click the selected file and go to Run Edit Checks.
- 3. Then click on the All Edit checks.
- 4. Click OK.

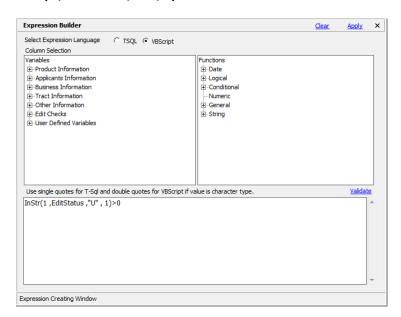
Filtering for User Defined Edits

- 1. Click on Filter.
- 2. Click on Custom Loan Information.
- 3. Click on Create New Expression:



4. In the expression window, type this expression:

InStr(1, EditStatus, "U", 1)>0



- 5. Click Apply.
- 6. Apply the filter.

The window will now only show the records that have user defined edits.

Running Edit Reports to Review Loans with Edits

Click on Analysis -> HMDA DF Reports.

CFPB Edits Summary - Will give a list of all the edits and how many loans fall within the criteria for that Edit:

Identify Address data with the following: TBD, multiple addresses, only numeric and addresses with commas or semicolons.	4
Total Number of Errors	168
Number of Syntactical Errors	0
Number of Validity Errors	152
Number of Custom Errors	4
Number of Quality Errors	12
Number of Macro Edits	0
	Total Number of Errors Number of Syntactical Errors Number of Validity Errors Number of Custom Errors Number of Quality Errors