

# IESUB File Transfer User Guide

## Survey of Terms of Lending

### Federal Reserve System

STATISTICS FUNCTION  
AUTOMATION SUPPORT

July 26, 2006

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## **OVERVIEW**

The Federal Reserve System's Internet Electronic Submission ("IESUB") Web Site provides the ability to submit files. The files can be created by any backend system that a reporting institution uses to generate its data.

This document provides the required file format for submitting the data via IESUB and provides a section on troubleshooting to assist reporting institutions in resolving problems they might have when submitting the file (see APPENDIX B). The method utilized to create the file is at the discretion of the reporter.

## STBL File Transfer File Format

An FR 2028A or FR 2028B file is comprised of a header record and one or more loans. The header consists of the 10 digit report institution ID followed by a 10 character report name and the report date. (For example the header for a FR 2028A report will be: 0123456789FR2028A 01-01-2006).

Each line on an STBL report contains all of the information for a loan. Loans are grouped in sets of 90. Each set of up to 90 loans constitutes a page.

Each data item in a file submitted for the FR 2028A and FR 2028B requires a nine character Item Identifier. The Item Identifier is composed as follows:

- Item Delimiter - L
- Page Number - 2 digit number (01- 99)
- Line Number - 2 digit number (01-90)
- Cell Reference - 4 character item identifier of the column on the report form.

### Example:

The first data value for the first loan on a FR 2028A will begin with the identifier L01019912:

- Item Delimiter - L
- Page Number - 01 (this is the first page)
- Line Number - 01 (this is the first loan on the page)
- Cell Reference - 9912 (this is the first data item of the loan)

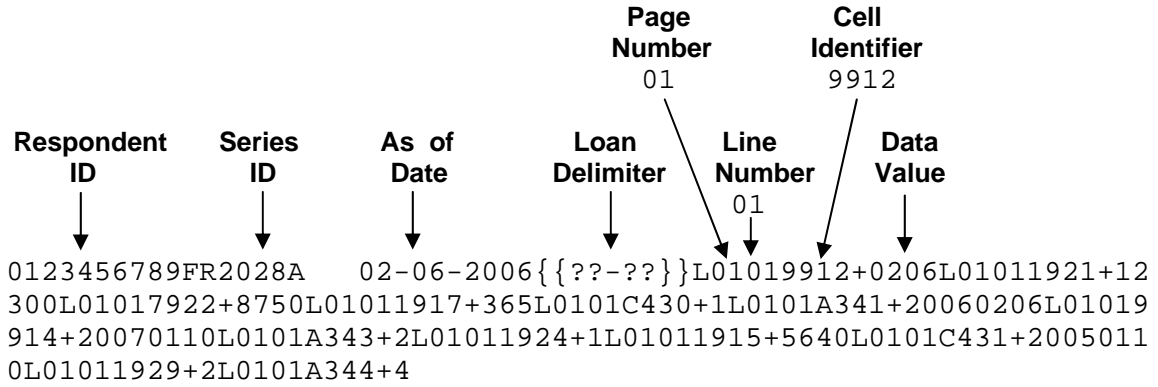
The 190<sup>th</sup> line/loan for the report will begin with the identifier L03109912:

- Item Delimiter - L
- Page Number - 03 (this is the third page)
- Line Number - 10 (this is the tenth loan on the page)
- Cell Reference - 9912 (this is the first data item of the loan)

**Note:** Each page is comprised of 90 loans, the second page begins with loan 91 and the third page begins with loan 181. Therefore the 190<sup>th</sup> loan is on the third page and is the 10<sup>th</sup> loan (line).

A string of characters, **{{??-??}}**, is placed at the beginning of each loan. This serves as a delimiter which indicates the start of each set of loan data.

**FIGURE 1 - EXAMPLE TEXT STRING FOR THE FIRST LINE OF AN FR 2028A**



## File Format for Survey of Terms of Business Lending

### Report Header Record for FR 2028A

The Report Header Record must be the first record in the file.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Report Institution ID	10	NUM	10-digit respondent identifier
Report Name	10	ALPHA	'FR2028A' <b>followed by three blanks</b>
Report As-of date	10	NUM	10-digit date (MM-DD-YYYY) which represents the as-of date of the report

### Loan Delimiter for FR2028A

There must be one Loan Delimiter at the beginning of each loan on the report form.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Loan Delimiter	9	ALPHA	{{??-??}}

### Report Data Record for FR 2028A

There must be one Report Data Record for each data item on the report form.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Item Identifier <sup>1</sup>			
Item Delimiter	1	ALPHA	'L'
Page Number	2	NUM	2 digit page number (01-99)
Line Number	2	NUM	2 digit line number (01-90)
Cell Reference	4	ALPHA	4-character item identifier of the column of the report form – see page 5 of this document for Cell References.
+	1	ALPHA	'+' plus sign, used as field separator
Data Value	0-9	NUM	Numeric data value being reported for the particular data cell defined by that row and column. Value must be in one of the following formats: <ul style="list-style-type: none"> <li>▪ an unsigned one to nine-digit value if positive (999999999);</li> <li>▪ zero (unsigned) if zero is the applicable value;</li> <li>▪ null, if the data field is not applicable.</li> </ul>

<sup>1</sup> See page 2 for an explanation of the Item Identifier

## Cell References to be used for FR 2028A

Report Item #	Description	Cell Reference
1.	Date Made <b>Note:</b> Enter date in mmdd format (e.g. 0206)	9912
2.	Face Amount of Loan (in dollars)	1921
<i>Rate of Interest</i>		
3.	Nominal rate of interest <b>Note:</b> Enter the interest rate in thousandths without a decimal (e.g. 8.750 should be entered as 8750)	7922
4.	Frequency with which interest is compounded or paid	1917
5.	Prime Rate used as Base Pricing Rate <b>Note:</b> Enter 1 for yes; 2 for no	C430
6.	Next date on which the loan rate may be recalculated <b>Note:</b> Enter date in yyyyymmdd format (e.g. 20060206)	A341
<i>Maturity Status</i>		
7.	Maturity Date <b>Note:</b> Enter date in yyyyymmdd format (e.g. 20060206)	9914
8.	Prepayment penalty <b>Note:</b> Enter 1 for yes; 2 for no	A343
9.	Number of scheduled repayments over term of loan	1924
<i>Commitment Status</i>		
10.	Amount of total commitment, formal or informal (in thousands) (if none, enter zero)	1915
11.	For formal commitments, date on which pricing terms were set (for loans extended under informal commitments and for loans for which there is no commitment, enter zero) <b>Note:</b> Enter date in yyyyymmdd format (e.g. 20060206)	C431
12.	Loan Secured <b>Note:</b> Enter 1 for yes; 2 for no	1929
13.	Risk Rating	A344

**FIGURE 2 - EXAMPLE TEXT STRING FOR FR 2028A**

				<b>Page Number</b>		<b>Cell Identifier</b>
				01		9912
<b>Respondent ID</b>	<b>Series ID</b>	<b>As of Date</b>	<b>Loan Delimiter</b>		<b>Line Number</b>	<b>Data Value</b>
↓	↓	↓	↓	↓	↓	↓
0123456789FR2028A		02-06-2006	{ { ??-?? } }	L01019912	01	+0206L01011921+12

300L01017922+8750L01011917+365L0101C430+1L0101A341+20060206L01019  
914+20070110L0101A343+2L01011924+1L01011915+5640L0101C431+2005011  
0L01011929+2L0101A344+4 { { ??-?? } } L01029912+0206L01021921+12300L010  
27922+8750L01021917+365L0102C430+1L0102A341+20060206L01029914+200  
70110L0102A343+2L01021924+1L01021915+5640L0102C431+20050110L01021  
929+2L0102A344+4 { { ??-?? } } L01039912+0206L01031921+12300L01037922+8  
750L01031917+365L0103C430+1L0103A341+20060206L01039914+20070110L0  
103A343+2L01031924+1L01031915+5640L0103C431+20050110L01031929+2L0  
103A344+4 { { ??-?? } } L01049912+0206L01041921+12300L01047922+8750L010  
41917+365L0104C430+1L0104A341+20060206L01049914+20070110L0104A343  
+2L01041924+1L01041915+5640L0104C431+20050110L01041929+2L0104A344  
+4 { { ??-?? } } L01059912+0206L01051921+12300L01057922+8750L01051917+3  
65L0105C430+1L0105A341+20060206L01059914+20070110L0105A343+2L0105  
1924+1L01051915+5640L0105C431+20050110L01051929+2L0105A344+4 { { ??-  
?? } } L01069912+0206L01061921+12300L01067922+8750L01061917+365L0106  
C430+1L0106A341+20060206L01069914+20070110L0106A343+2L01061924+1L  
01061915+5640L0106C431+20050110L01061929+2L0106A344+4 { { ??-?? } } L01  
079912+0206L01071921+12300L01077922+8750L01071917+365L0107C430+1L  
0107A341+20060206L01079914+20070110L0107A343+2L01071924+1L0107191  
5+5640L0107C431+20050110L01071929+2L0107A344+4 { { ??-?? } } L01089912+  
0206L01081921+12300L01087922+8750L01081917+365L0108C430+1L0108A34  
1+20060206L01089914+20070110L0108A343+2L01081924+1L01081915+5640L  
0108C431+20050110L01081929+2L0108A344+4 { { ??-?? } } L01099912+0206L01  
091921+12300L01097922+8750L01091917+365L0109C430+1L0109A341+20060  
206L01099914+20070110L0109A343+2L01091924+1L01091915+5640L0109C43  
1+20050110L01091929+2L0109A344+4 { { ??-?? } } L01109912+0206L01101921+  
12300L01107922+8750L01101917+365L0110C430+1L0110A341+20060206L011  
09914+20070110L0110A343+2L01101924+1L01101915+5640L0110C431+20050  
110L01101929+2L0110A344+4 { { ??-?? } } L01119912+0206L01111921+12300L0  
1117922+8750L01111917+365L0111C430+1L0111A341+20060206L01119914+2  
0070110L0111A343+2L01111924+1L01111915+5640L0111C431+20050110L011  
11929+2L0111A344+4 { { ??-?? } } L01129912+0206L01121921+12300L01127922  
+8750L01121917+365L0112C430+1L0112A341+20060206L01129914+20070110  
L0112A343+2L01121924+1L01121915+5640L0112C431+20050110L01121929+2  
L0112A344+4 { { ??-?? } } L01139912+0206L01131921+12300L01137922+8750L0  
1131917+365L0113C430+1L0113A341+20060206L01139914+20070110L0113A3  
43+2L01131924+1L01131915+5640L0113C431+20050110L01131929+2L0113A3  
44+4 { { ??-?? } } L01149912+0206L01141921+12300L01147922+8750L01141917  
+365L0114C430+1L0114A341+20060206L01149914+20070110L0114A343+2L01  
141924+1L01141915+5640L0114C431+20050110L01141929+2L0114A344+4

**File Format for Survey of Terms of Lending to Farmers**

### Report Header Record for FR 2028B

The Report Header Record must be the first record in the file.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Report Institution ID	10	NUM	10-digit respondent identifier
Report Name	10	ALPHA	'FR2028B' <b>followed by three blanks</b>
Report As-of date	10	NUM	10-digit date (MM-DD-YYYY) which represents the as-of date of the report

### Loan Delimiter for FR2028B

There must be one Loan Delimiter at the beginning of each loan on the report form.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Loan Delimiter	9	ALPHA	{{??-??}}

### Report Data Record for FR 2028B

There must be one Report Data Record for each data item on the report form.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Item Identifier <sup>2</sup>			
Item Delimiter	1	ALPHA	'L'
Page Number	2	NUM	2 digit page number (01-99)
Line Number	2	NUM	2 digit line number (01-90)
Cell Reference	4	ALPHA	4-character item identifier of the column of the report form – see page 8 of this document for Cell References.
+	1	ALPHA	'+' plus sign, used as field separator
Data Value	0-9	NUM	Numeric data value being reported for the particular data cell defined by that row and column. Value must be in one of the following formats: <ul style="list-style-type: none"><li>▪ an unsigned one to nine-digit value if positive (999999999);</li><li>▪ zero (unsigned) if zero is the applicable value;</li><li>▪ null, if the data field is not applicable.</li></ul>

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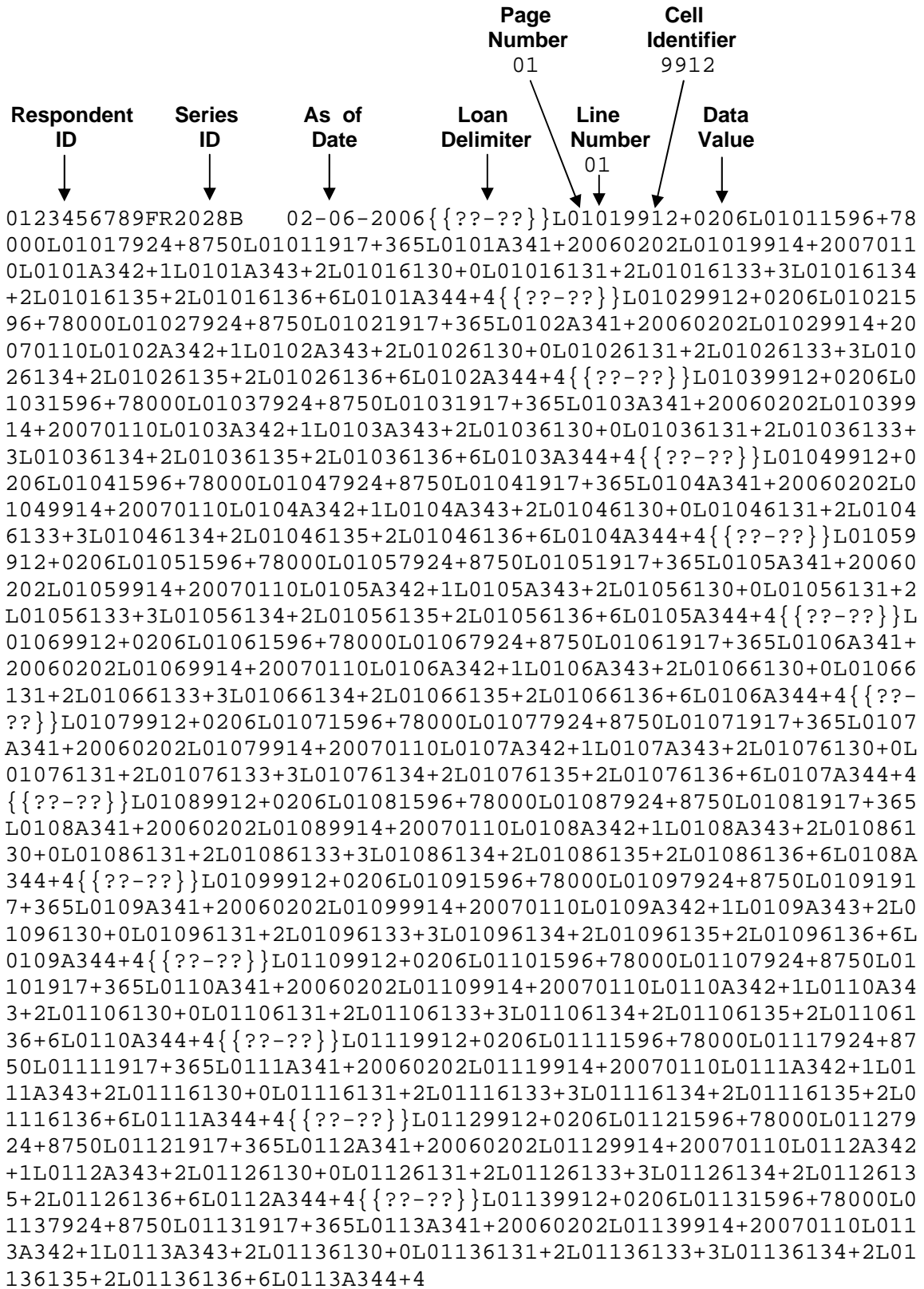
<sup>2</sup> See page 2 for an explanation of the Item Identifier

**Cell Reference to be used for FR 2028B**

Report Item #	Description	Cell Reference
1.	Date Made <b>Note:</b> Enter date in mmdd format (e.g. 0206)	9912
2.	Face Amount of Loan (in dollars)	1596
<i>Rate of Interest</i>		
3.	Nominal rate of interest <b>Note:</b> Enter the interest rate in thousandths without a decimal (e.g. 8.750 should be entered as 8750)	7924
4.	Frequency with which interest is compounded or paid	1917
5.	Next date on which the loan rate may be recalculated <b>Note:</b> Enter date in yyyyymmdd format (e.g. 20060206)	A341
<i>Maturity Status</i>		
6.	Maturity Date <b>Note:</b> Enter date in yyyyymmdd format (e.g. 20060206)	9914
7.	Termination options	
	a. Callable <b>Note:</b> Enter 1 for yes; 2 for no	A342
	b. Prepayment penalty <b>Note:</b> Enter 1 for yes; 2 for no	A343
8.	Number of scheduled repayments over term of loan	6130
9.	Commitment Status	
	Loan made under a commitment <b>Note:</b> Enter 1 for yes; 2 for no	6131
10.	Federal Insurance Status <b>Enter:</b> 1 for Insured or guaranteed by Consolidated Farm Service Agency 2 for Insured or guaranteed by other U.S. agencies or departments 3 for Not insured by U.S. Agencies or departments	6133

- |     |  |      |
|-----|--|------|
| 11. | Security Status<br><b>Enter:</b><br>1 for Farm real estate<br>2 for Other collateral<br>3 for Not secured  | 6134 |
| 12. | Participation Status<br><b>Enter:</b><br>1 for Participation loan originated by your bank<br>2 for Participation loan originated by others<br>3 for Not participated   | 6135 |
| 13. | Primary Purpose of Loan<br><b>Enter:</b><br>1 for Feeder livestock<br>2 for Other livestock<br>3 for Other current operating expenses<br>4 for Farm machinery and equipment<br>5 for Purchase or improve farm real estate<br>6 for All other loans | 6136 |
| 14. | Risk Rating  | A344 |

**FIGURE 3 - EXAMPLE TEXT STRING FOR FR 2028B**



**File Format for Prime Rate Supplement to Survey of Terms of Lending**  
(effective 5/1/2006)

**Report Header Record for FR 2028S**

The Report Header Record must be the first record in the file.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Report Institution ID	10	NUM	10-digit respondent identifier
Report Name	10	ALPHA	'FR2028S' <b>followed by three blanks</b>
Report As-of date	10	NUM	10-digit date (MM-DD-YYYY) which represents the as-of date of the report

**Report Data Record for FR 2028S**

There must be one Data Value for each of the five lines on the report form.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Item Identifier			
Item Delimiter	1	ALPHA	'L'
Cell Reference (Prime Rate)	4	ALPHA	'7923'
+	1	ALPHA	'+' plus sign, used as field separator
Data Value	4	NUM	Numeric data value. The Prime Rate field should not contain the decimal point. The data should be in thousandths. For example, 8.750 should be represented as 8750. <ul style="list-style-type: none"> <li>▪ an unsigned one to four-digit value if positive (9999);</li> <li>▪ zero (unsigned) if zero is the applicable value;</li> <li>▪ null, if the data field is not applicable.</li> </ul>

**FIGURE 4 - EXAMPLE TEXT STRING FOR FR 2028S**

<b>Respondent ID</b>	<b>Series ID</b>	<b>As of Date</b>	<b>Item Identifier</b>	<b>Data Value</b>
0123456789	FR2028S	02-06-2006	L7923+1234	+1234+1234+1234+1234

## File Format for Prime Rate Supplement to Survey of Terms of Lending (effective 8/7/2006)

### Report Header Record for FR 2028S

The Report Header Record must be the first record in the file.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Report Institution ID	10	NUM	10-digit respondent identifier
Report Name	10	ALPHA	'FR2028S' <b>followed by three blanks</b>
Report As-of date	10	NUM	10-digit date (MM-DD-YYYY) which represents the as-of date of the report

### Report Data Record for FR 2028S

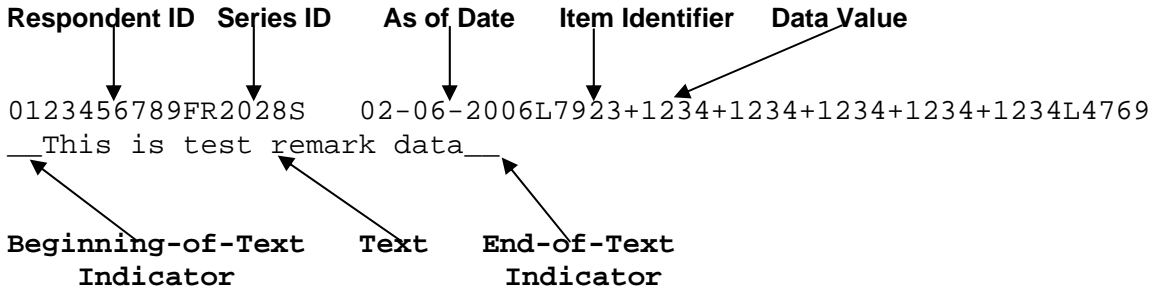
There must be one Data Value for each of the five lines on the report form.

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Item Identifier			
Item Delimiter	1	ALPHA	'L'
Cell Reference (Prime Rate)	4	ALPHA	'7923'
+	1	ALPHA	'+' plus sign, used as field separator
Data Value	4	NUM	Numeric data value. The Prime Rate field should not contain the decimal point. The data should be in thousandths. For example, 8.750 should be represented as 8750. <ul style="list-style-type: none"> <li>▪ an unsigned one to four-digit value if positive (9999);</li> <li>▪ zero (unsigned) if zero is the applicable value;</li> <li>▪ null, if the data field is not applicable.</li> </ul>

**Report Text Record for FR2028S**

<u>Field</u>	<u>Length</u>	<u>Type</u>	<u>Value/Description</u>
Item Identifier			
Item Delimiter	1	ALPHA	'L'
Cell Reference (Remarks)	4	ALPHA	'4769'
Beginning of text indicator	2	ALPHA	'__' 2 underscores used to indicate the beginning of the text.
Text	0-6,000	ALPHA	Variable length text field; apostrophe, double quotes, backslash, less than, underscore, and carriage control characters (e.g., hard return, tab) are not valid characters.
End-of-text indicator	2	ALPHA	'__' 2 underscores used to indicate the end-of-text.

**FIGURE 4 - EXAMPLE TEXT STRING FOR FR 2028S**



## APPENDIX A

### IESUB File Transfer Procedure

Click on the **File Transfer** button.

The screenshot shows the IESUB (Internet Electronic Submission of Statistical Reports) website. The header is dark red with the IESUB logo and title. A navigation menu on the left includes buttons for Home, Data Entry, File Transfer (circled in red), Review, Links, and Feedback. A central banner area contains a welcome message, a tip about printing receipts, and a link to a BHC Report Modernization Tutorial. A right-hand sidebar contains links for Change Password, FRB Contacts, Enrollment, Terms, Privacy Statement, and Browser Compatibility. A warning message is displayed at the bottom of the page.

**IESUB**  
Internet Electronic Submission of Statistical Reports

Help

Home

Data Entry

**File Transfer**

Review

Links

Feedback

Welcome to the Federal Reserve System's  
Internet Electronic Submission System for Statistical Reports

Hours of operation are:  
8AM to 8PM ET  
Monday - Friday  
(except Bank holidays)

IESUB is usually, but not guaranteed to be, available at other times.

**Tip:** Did you forget to print your report receipt?  
If you keyed your report into IESUB or uploaded a file in the Spreadsheet File Transfer format you can use the **Review** button at the left to get a copy of your receipt.

View the [BHC Report Modernization Tutorial](#).

[Change Password](#)

[FRB Contacts](#)

[Enrollment](#)

[Terms](#)

[Privacy Statement](#)

[Browser Compatibility](#)

If you have questions about using IESUB please contact your Federal Reserve analyst.

**WARNING:** This computer system is owned and operated by the Federal Reserve System for, among other parties, the United States Government. This system is for OFFICIAL USE ONLY and is subject to monitoring at all times.

Figure 5: IESUB File Transfer

Enter the name and path of your file in the **Filename:** box. You can click on the **Browse...** button to locate your file.

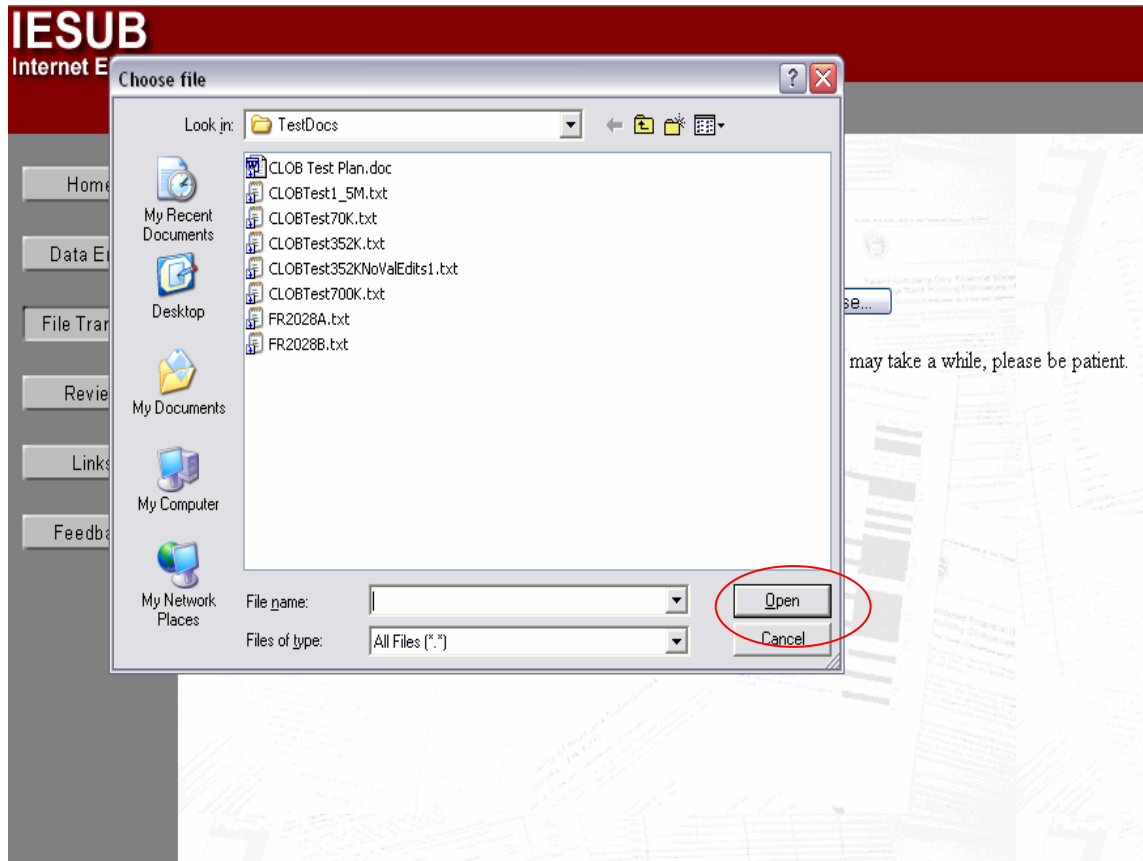


Figure 6: Browse for Text File

**Note:** When you click on the **Browse...** button, you will open the Windows directory file locator. Navigate the folders, select the file, and click on the **Open** button to fill in the **Filename:** box.

Click on the **Submit** button to transfer your file to the IESUB system. IESUB will check your data for validity (e.g. if item 5 is 0 then item 6 must be 0). If the data are valid, IESUB returns a time-stamped receipt of your data (Figure 3). Print the receipt and file it in accordance with Operating Circular 5.

**IESUB**  
 Internet Electronic Submission of Statistical Reports

FR 2028A - Survey of Terms of Business Lending (STBL)  
 0123456789 -- FRBNY Test Bank  
 REVISED DATA for the Period Ended February 7, 2005  
 Received by the Federal Reserve Bank 2005-12-20 13:27:58.0 Eastern Time

	1	2	3	4	5	6	7	8	9	10	11	12	13
1	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
2	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
3	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
4	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
5	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
6	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
7	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
8	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
9	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
10	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
11	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
12	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
13	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4
14	0207	12301	8.751	4	N	20050207	20050207	N	1	123456789	20050207	Y	4

**Figure 7: Receipt page populated with the valid data from your file.**

If invalid data are detected IESUB will display a warning and the validity edit error report containing the validity edit errors found (Figure 4). Your data will be saved in IESUB but will not be accepted. You must correct and resubmit your data.

You can either correct the data in your backend system/file and resubmit them or click **Done** and, on the IESUB home page, click **Data Entry** to correct and resubmit your data within IESUB.

**IESUB**  
Internet Electronic Submission of Statistical Reports

Done Help

FR 2028A - Survey of Terms of Business Lending (STBL)  
0123456789 -- FRBNY Test Bank  
UNSUBMITTED Data for the Period Ended February 7, 2005  
Saved 2006-01-30 08:35:07.0 Eastern Time

[View Saved Data](#) | [View Validity Error Report](#) | [View Both Reports](#)

Validity Edit Errors		
Line #	Val Edit #	Error Text
1	60	If Item 6 is not 0, then Item 6 must be greater than or equal to Item 1 in line 1
1	78	If Item 7 is not 0, then Item 7 must be greater than or equal to Item 1 in line 1
9	60	If Item 6 is not 0, then Item 6 must be greater than or equal to Item 1 in line 9
9	78	If Item 7 is not 0, then Item 7 must be greater than or equal to Item 1 in line 9
11	37	Item 2 cannot be null in line 11

**Figure 8: Validity Edit Error Report**

## APPENDIX B

### Troubleshooting Problems

Problems related to submitting your file are most likely a result of not saving the file correctly, not formatting the file correctly, or having invalid characters in the file. This section provides helpful information for troubleshooting these problems.

#### Saving the File

The file must be saved as a text file with a text extension (\*.txt). If you did not save the file as a text file, for example, if you saved it as an Excel, HTML, or Word file, you will get an error.

#### Formatting the File

If you saved your file as a text file with a text extension (\*.txt), check that the file is in the correct format and does not have any extraneous characters.

Verify that:

- Columns 1-10 contain your Institution ID
- Columns 11-20 contain the report name specified in this user guide
- Columns 21-30 contain the correct as-of date for the report in MM-DD-YYYY format, including the leading zero for January – September (e.g., 01 for January)
- Each loan (line) on the FR 2028A and B begins with the loan delimiter {{??-??}}
- The file contains **all** the correct cell identifiers for the report as specified in this user guide
- The line identifiers for the FR 2028A and B are nine characters long as described on page 2.
- The line identifier for the FR 2028S is L7923
- Each cell identifier is followed by a plus sign (+)
- The number of plus signs and data value combinations for each loan match the number of columns of data for the report specified in this user guide
  - FR 2028A - 13 columns
  - FR 2028B – 15 columns
  - FR 2028S – 1 column

**TIP: Compare your file to the sample file in this user guide to check the format of your file.**