

Appendix

B

4885 SSBFSCR Survey of Small Business Finances Screener
CATI Instrument Test Plan
3 February 1999

Please read these instructions before you begin testing. These instructions pertain to testing the copy of the instrument that resides at: NORC-DT/PROJECTS:4885/CATITEST.

Please copy the batch job 4885TEST.BAT to your home directory on the N: drive. The batch job is attached to the E-mail message.

DIRECTIONS:

Click on the file item at the right-hand side of the message.

Then, click on Attachments and Save Attachments.

You will get a Save As: dialog box. Click on the Browse... button.

Click on the arrow alongside the Drives: window for a pull-down list of drives you're mapped to.

Find the N: drive, and click on it. When the "Directories" reference changes to n:\windows, click on the OK button.

Back at the Save As: dialog box, click on OK. The file will be copied to your home directory.

When you are ready to test, you will need to invoke the batch job, which will map you properly to SurveyCraft and to the data area where the questionnaire test files reside.

DIRECTIONS:

Exit to the Program Manager.

End your Windows session. While you are testing, arrange to take communication via telephone, and advise your customers you will be checking E-mail periodically. You will obtain best results by exiting Windows in order to run SurveyCraft.

After you end your Windows session, your machine will be parked at the N: prompt. Type

cd windows

and strike <ENTER> once.

You will be pointed to the N:\WINDOWS subdirectory. Type

4885TEST

and strike <ENTER> once.

The batch job will map you to several things you need to be mapped to in order to run SurveyCraft, then you will be routed straight into SurveyCraft CATI mode.

NOTE:

This test is being conducted in “normal data entry” mode, that is, the instrument is being tested here without integrating the Survey Management System, the SMS, also called the TNMS.

HELPFUL HINT: Do NOT “double-pump” the <ENTER> key, or any other key, in SurveyCraft. The software will ACT upon ALL the keystrokes you enter, and you may find yourself going round in circles, winding up where you were before, and other annoying things.

HELPFUL HINT: In SurveyCraft, when a letter appears in **BOLD** on screen, you need only to type the letter to invoke the command. If you type a bolded letter AND <ENTER>, this will have a similar effect to “double-pumping” keys.

HELPFUL HINT: When working in SurveyCraft ALWAYS put your “num lock” ON. You will then be able to use the plus and minus signs on the number keypad to back up and go forward.

Check the Job File reference in the middle of the screen.

If it reads SSBFSCR, you can ignore the next paragraph.

If it does NOT read SSBFSCR, you will need to UPDATE it. Strike the letter J (DON'T STRIKE <ENTER>!) to gain access to the Job Maintenance Module. Once you are in the Job Maintenance Module, use the arrow keys to position the cursor so SSBFSCR is highlighted, then strike <ENTER>.

Once you have correct job file reference, you may proceed.

Use the list of test cases SSBFSCR.LST. The “case number” you see on the CATI screen is equal to the “SurveyCraft ID” in the list. The other preloaded data items (if any) are provided for your reference.

If SurveyCraft does NOT deliver the case record you asked for, you may try another. If you need to test that particular case, let me know so the case can be reloaded.

SurveyCraft navigation

| KEY or KEYSTROKE COMBINATION | MEANING |
|--|---|
| Bolded letter in menu option | Executes that particular command. In your CATI menu, you will only be able to Select a J ob, enter a case in C ATI mode, or E xit. Just strike the bolded letter to execute the command. |
| <F7> | Refused |
| <F8> | Don't Know |
| [+] on number keypad | Restore current response data |
| [-] on number keypad | Back up one variable |
| [HOME][PAGE DOWN] (hold down HOME & strike PAGE DOWN) | Restore all responses to first unanswered question |
| [CTRL][END] (hold down CTRL & strike END) | Exit case and write data to questionnaire file |

SurveyCraft dialog boxes

| | |
|--|--|
| Amend/Recover completed interview | Presented when you enter a previously completed interview in SurveyCraft. If you want to recover the interview screen-by-screen, select the “amend” option. If you want the program to recover to the first unanswered question, select the “recover” option. If the data truly comprise a complete interview according to the current specifications, SurveyCraft will recover all responses, then display the “filing case” message. |
| Resume from breakoff point/ recover/amend each question | Presented when you enter a previously suspended SurveyCraft interview. Follow the same instructions as above. |

NOTE: When you execute [CTRL][END], called *suspending* the case, you will often get a dialog asking you if you want to Discard or Return. This dialog often appears (and scares people) even when there is NO data beyond the point at which you are suspending.

If you are not sure, you can always select Return, then use [+] to attempt to restore the current data. If

no response data appears, the current variable is EMPTY.

It is always possible, especially when changes have been introduced into the instrument either by changing the specifications or changing prior response data, that the instrument might have brought you to an unanswered question, and that there may be data beyond that point.. You must therefore be aware of what you are doing and what is being done to the instrument when you are testing, leaving and re-entering the same case several times. In summary, there is almost always NO data beyond the point you are exiting, and it is YOUR responsibility to keep track of how far you've gone.

What to Test With

I performed reverse translation of this instrument when I finished my first pass at programming and testing. I am providing you with a "hard copy forward translation" of the IDS code. This file is the .rtf, or Rich Text Format, version of the questionnaire as it is now. This is a fairly easy to read hard copy translation of the questionnaire. You may open this .rtf file in WordPerfect. You will have to allow it to be converted from Rich Text Format; just say "yes" when asked, the conversion is quick and painless.

The .rtf contains variable name, variable label, question type, variable length, question text, code frame, and skip instructions. The skip instructions appear in boxes with shaded backgrounds. Note that just as in the IDS, "refused" is represented by "REF," "don't know" is represented by "DK," "answered" is represented by "ASKED," and "missing" is represented by "MISS."

You should use this in tandem with the latest hard copy WordPerfect version of the instrument. You will be able to compare what I have programmed against the reference document. I have tried to be as faithful as possible to the reference document. If you have any questions about discrepancies please ask as soon as possible; nearly all discrepancies will be attributable to differences between others' interpretation of how skip specifications should be written and how I implemented them in SurveyCraft; it is my task to understand what was intended and program so that what was intended is carried out efficiently.

What To Test For

- Check **every skip instruction** contained in the .rtf file to ensure that the instrument skips as expected. Every time you test a skip, check it off in the .rtf file. Check for each condition; if the instrument is supposed to skip based on "no," "refused," and "don't know" responses, test each response and check it off.
- Use **every response** in **every code frame** to ensure the instrument performs as expected. Each time you test a response, check it off in the .rtf file.
- Use **every nonresponse key** at **every variable** to ensure the instrument performs as expected. Generally, "refused," "don't know" and "missing" take the same path as a negative response. If you want the instrument to perform in a manner other than it does, please let me know. Again, use the .rtf file to check off when you've used each nonresponse key at each variable.

- Where more complex skips are involved, that is, where skips are performed based on more than one condition being true, you will want to create **mock interviews** to keep track of which conditions and condition combinations you've tested.
- Test **variable labels** to see if they are clear enough to help you keep track of what variable's response you're entering. If they are not sufficient I can change them.
- Test **out-of-range responses** to make sure SurveyCraft "beeps" and does not otherwise allow these to be entered. Try entering things you don't expect the program to accept in all variables and let me know when the program has accepted something inappropriate, for example, if the program accepts characters other than what it ought to accept, like letters where number responses are expected and vice versa.
- Test to see if SurveyCraft allows you to advance by **[ENTER] without entering any response data**.
- Test to ensure that SurveyCraft allows you to enter the **proper number of responses** for each variable.

To summarize, I recommend that in the following order, you test:

All skips
 Valid responses
 Nonresponse keys (refused, missing, don't know) at **all** screens
 [ENTER] without entering data
 Out-of-range and "nonsense" response data
 Proper number of responses

Test using:

Scripted interviews, for testing more complex condition sets. I recommend you test for these scenarios:

Owner answers phone
 Owner comes to the phone
 Owner not available, proxy comes to the phone
 Owner not available, proxy answered the phone
 Proxy unavailable right now
 No proxy exists for owner

Any other scenarios you can think of

Any skip patterns I did not include here also must be tested.

Testing goals

- At this point in development I expect to be performing **debugging and modification**. Debugging means making the instrument work the way it's supposed to, and modifying variables so that they meet specifications, for example, if you discover that I have programmed a question to be "code one only" and it is supposed to be "multiple response," or if I have omitted a variable in error. I will also modify what SurveyCraft will accept for responses at variables if you find the program accepts inappropriate characters, for example, letters where numbers are expected. Modification means introducing changes to the instrument, including text changes, question additions and deletions, question type changes, question order changes, and any other changes needed. It will usually take me longer to implement modifications than to implement fixes to bugs.
- I will provide feedback on the scope of work involved in major changes.
- Ideally, testing should continue until you have tested everything in the instrument and it works to your satisfaction.

Data Cleanliness/front End Validation Strategy

All "missing" preloaded data items are populated with the high ASCII character 211. This character looks like this: ℓ. This is also the character inserted by striking <F9>. The character's meaning is "there is no data present for this variable and it is NOT 'missing,' that is, there is not SUPPOSED TO BE any data here because there is no direction 2 in this address, et cetera." I did this to prevent the client from challenging legitimately missing components of names and addresses, reassuring them that we have taken great care to either get a valid entry for the address field or that we indicated we did NOT miss collecting data for this field in error, but rather that we asked for data for this field and the respondent indicated there is none.

I wrote a lot of code to support keeping the data clean for each address we collect or verify. These front-end requirements are EXTREMELY STRINGENT and may need to be adjusted. I thought it better to start out too stringent than not stringent enough.

Here is a comprehensive list of front-end validations for each address and other uncoded and numeric variables in the instrument:

| <u>VARIABLE</u> | <u>RULES</u> |
|--|---|
| ALL: | <p>Entry required.</p> <p>Only specified characters are allowed. If it's not listed as allowable I disallowed its entry.</p> <p><F9> not allowed except at:</p> <p>Middle Name</p> <p>Address Direction 1</p> <p>Street Type</p> <p>Address Direction 2</p> <p>Dwelling Unit/Room</p> <p>Unit Number/Room Number</p> |
| Street name: | <p>ONLY uppercase letters, numbers, spaces allowed.</p> <p>Cannot be <F7>, <F8>, or <F9>.</p> <p>Cannot be ONLY spaces. At least ONE number or letter required.</p> |
| Street type: | <p>Only "ST,CT,AVE,DR,RD,CIR,PKWY,LN,BLVD,HWY" or <F9> allowed.</p> <p>Cannot be <F7> or <F8>.</p> |
| Dwelling unit/unit Unit number/room number (same validations): | <p>Only uppercase letters, numbers, spaces, or <F9> allowed.</p> <p>Cannot be ONLY spaces. Must contain at least ONE number or letter.</p> <p>Cannot be <F7> or <F8>.</p> |
| City: | <p>Only uppercase letters and spaces allowed.</p> |
| County (same validations): | <p>Cannot be <F7>, <F8>, or <F9>.</p> <p>Cannot be ONLY spaces. At least ONE uppercase letter required.</p> <p>(there is no way to force SurveyCraft to ensure there are at least two letters present; it can't measure a substring of an address for character type, so the string could be long enough and consist of one letter and four spaces, for example.)</p> |

| | |
|----------------------|--|
| State: | Only the standard 2-digit uppercase alpha state abbreviations or "FC" for foreign country are allowed. Cannot be <F7>, <F8>, or <F9>. |
| Zip code: | Only five numbers, <F7> or <F8> are allowed. Cannot be <F9>. |
| Other/specify: | Only uppercase letters, numbers, dashes, periods, commas, single apostrophes, and spaces allowed. Cannot be ONLY spaces. Cannot be ONLY apostrophes. Cannot be ONLY periods. Cannot be ONLY dashes. Cannot be ONLY commas. At least ONE letter or number is required. If ONLY numbers, interviewer gets "soft check" dialogue confirming that the entry should consist of only numbers. The interviewer can edit the entry or continue. <F9> not allowed. |
| Month: | Will accept ONLY 1 through 12. ONLY numeric characters allowed. <F9> not allowed. For child birth month, <F7> and <F8> not allowed. |
| Year: | Will accept only 1999. 1998 and 2000 will invoke an "unlikely response" message, the interviewer can force the program to accept these entries through 1999. ONLY numeric characters allowed. <F7>, <F8>, and <F9> not allowed. |
| Number of employees: | Allows up to 99999999. Business is ineligible if the three employment variables sum to > 499. |

Text Substitutions

I have put quite a few text substitutions in the instrument, mostly where we ask questions about the business owner but may be speaking to either an owner or a proxy. Please pay special attention to

ensure these text substitutions work correctly.

Reporting Test Results

Please use the Quattro Pro spreadsheet I am sending you to record test results. Name one person to coordinate test result reporting. Please de-duplicate test result reports. I will fix all problems you report as soon as possible and send E-mail to notify everyone when this is done. When I have reported a problem as fixed, PLEASE re-test to ensure that I have fixed it as you expected it to be fixed. FYI the SurveyCraft question number is located in the lower left-hand corner of the screen. It is critical that you provide me with this number, to ensure I work on the right thing. If you have any questions you may contact me at 312-759-4232.