Collection and Use of Social Security Numbers in the Area Frame

Dwaine Nelson
Loren Nordhausen
Henry Power

ABSTRACT

This study examines the practicality of collecting Social Security Numbers (SSN) and Employer Identification Numbers (EIN) in the Area Frame for use in overlap checking in multiple frame surveys. SSN's and EIN's were collected on the June Enumerative Survey and the December Enumerative Survey in two states -- South Dakota and Virginia -- beginning in 1982. The study was extended to three additional states -- North Dakota, Ohio, and Tennessee -- during 1983 and 1984. The Area Frame survey units were matched against List Frame units using the SSN (and EIN) to determine the feasibility of using SSN's in the overlap check. Also, response rates between survey years were compared in an attempt to determine whether collection of SSN's has an adverse effect upon overall survey response rates. Although the study was not designed to make statistical tests of significance, the match procedures and data comparisons indicate that SSN's are indeed a valuable tool for overlap checking, and that survey response rates are not adversely affected.

KEY WORDS: Social Security Number, Employer Identification Number, overlap, nonoverlap

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* This paper was prepared for limited distribution within SRS. *
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Washington, D.C. November 1984
Special studies were conducted in five States -- North Dakota, Ohio, South Dakota, Tennessee, and Virginia, to determine the importance and practicality of using Social Security Numbers (SSN) in overlap checking for multiple frame surveys. Response rates in the Area Frame were also examined to determine whether collection of SSN's would adversely affect overall survey refusal rates. The studies began with the 1982 June Enumerative Survey in South Dakota and Virginia and were extended to North Dakota, Ohio, and Tennessee during 1983. Analysis of the data collected indicated the following:

- Collection of Social Security Numbers (SSN) apparently does not adversely affect overall survey response rates. Although there are refusals to the SSN question, most of these are also refusals to all survey questions.

- Some enumerators are reluctant to ask the SSN questions unless they are strongly encouraged. The proportion of reports in the "inaccessible" response code category for SSN is relatively large, indicating this may be a "convenience" category.

- The proportion of Area Frame records with SSN's does increase substantially from the initial survey to subsequent surveys. However, a practical upper bound of 70-90 percent will take several years to accomplish using current procedures.

- The match of Area Frame records to List Frame records using the SSN provides a substantial number of matches (5-20 percent) which are not considered as "matches" when making the usual overlap checks. Some reasons for misclassification are current software system constraints (e.g., only one SSN assigned to a partnership record), and "not following all" manual overlap review procedures as outlined in the instructions. However, definite additional overlap was found in one State using the SSN match, and there are several instances where additional overlap is suspected. The SSN match provides another convenient tool for identifying potential overlap.
RECOMMENDATIONS

Recommendations regarding the collection and use of Social Security Numbers (and Employer Identification Numbers) are as follows.

- Social Security Numbers provide a powerful tool for linking files. This is also true for matching Area Frame Records with List Frame Records. It should be an Agency goal to obtain and maintain a SSN for every name on the List and Area frames; and to collect SSN's in most SRS surveys. A high proportion of List Frame and Area Frame records with SSN is needed to make the overlap check really effective in all States. Enumerators should be encouraged strongly to collect SSN's, but not at the expense of obtaining a refusal for other survey information.

- Specific instructions for the use of SSN in overlap checking need to be developed. The Mail Maintenance System (MMS) could be expanded to provide a listing of the area records matching a list record on SSN/EIN and not cross-referenced to that list record. This listing with the other MMS Automated overlap/nonoverlap procedure outputs would be used in making the final overlap determination. All new SSN/EIN's obtained during the survey proper could be matched against the LSF and the matching LSF record printed. This would require keying the SSN/EIN's and segment/tract as the questionnaires are received. SSN/EIN's should be used as an aide in the overlap determination as are address, telephone numbers, etc., and not considered as a factor for absolute overlap or nonoverlap determinations.
COLLECTION AND USE OF SOCIAL SECURITY NUMBERS
IN THE AREA FRAME

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INTRODUCTION

The use of the Social Security Number (SSN) as a match variable to determine overlap/nonoverlap status of area frame records in multiple frame sampling is not a new concept. As early as 1971, Young indicated in a feasibility study [1] conducted in Tennessee and Oklahoma that: SSN's could be reported with relative ease; about ten percent of the respondents either hesitated or showed hostility toward the SSN question; enumerators differed in their abilities to obtain SSN numbers; and use of the SSN in overlap checking, when combined with conventional methods, resulted in more overlap determinations than use of only conventional methods. Subsequent unpublished studies on the use of different List Frame questionnaire versions in Tennessee and South Carolina in 1976 and 1977 indicate that inclusion of SSN's on questionnaires did not significantly affect response rates. Based upon the results of these studies alone, one might conclude that SSN's are beneficial to the Statistical Reporting Service's operational procedures.

Considering the previous studies, one logical question is "Why hasn't SRS moved more rapidly toward the collection and use of SSN's"? Following the 1981 study, Tennessee is the only State Statistical Office (SSO) which has collected SSN's in the Area Frame surveys for use in overlap determination. Probably the single most important reason is the concern over the possible effect on survey response rates. The studies conducted earlier were done in southern or southwestern states where survey refusal rates are generally much lower than some areas of the United States such as the Midwest. Also, overall refusal rates have tended to increase during the last 10-15 years, along with a concern for the privacy of individuals. These factors have caused a reluctance to change any procedure which could possibly have a negative effect on response rates, no matter how small. Another reason SSN's have not been collected and used for overlap checking is the question of whether a SSN match would actually gain much over the conventional procedures. The Tennessee study was conducted 14 years ago, and the general feeling was that instructions and methods for determining overlap have improved since that time. Also, even if SSN's proved to be beneficial, there was a concern that drastic changes would be needed in operating instructions.
Agency policy for the past several years has been to encourage the collection of SSN's on list frame questionnaires. This policy has evolved probably because of the recognized need to use SSN as a cross-reference to other government list sources, and because of recommendations from the earlier studies. However, Agency policy has not mandated the collection of SSN's on list frame questionnaires, nor even encouraged it on Area Frame surveys. The concern over response rates in the Area Frame surveys and the need to identify advantages/disadvantages of using SSN in overlap procedures were the primary reasons additional studies were required. Accordingly, plans were developed to begin a new study during 1982 in South Dakota and Virginia.

South Dakota and Virginia were selected for the study primarily because they represented different geographic areas and both SSO's had a high number of records on the List Frame master with SSN's. In order to increase this number of records with SSN's even further, a computer tape with names and SSN's was obtained from the Agricultural Stabilization and Conservation Service (ASCS). A listing of the names with SSN's that did not already exist on the List Frame master was then created. The South Dakota and Virginia SSO's matched these alphabetically-sorted lists of names against their LSF master and coded a transaction to insert the SSN whenever a match was found and the SSN was missing from the LSF master. The number of SSN's added as a result of this process is shown in Table 1.

<table>
<thead>
<tr>
<th>SSO</th>
<th>No. of Names Supplied</th>
<th>No. Of New SSN's Added</th>
<th>Total SSN's</th>
<th>Total No. of List Frame Records</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dakota</td>
<td>6,155</td>
<td>1,886</td>
<td>87,537</td>
<td>94,756</td>
</tr>
<tr>
<td>Virginia</td>
<td>7,361</td>
<td>* 3,000</td>
<td>85,093</td>
<td>143,495</td>
</tr>
</tbody>
</table>

* Approximately

Virginia also obtained SSN's from a county estimates survey sample selected from the List Frame master, which yielded 1,608 SSN's out of 2,149 mail returns. The survey response rate on one-half of the sample which asked for SSN was 40.5 percent, compared with 41.3 percent for one-half without the request for SSN (Table B-1, Appendix B). Therefore, asking for the SSN in the Virginia survey did not affect the survey response rate significantly. Also, approximately 75 percent of those reporting from the "SSN" sample reported a Social Security Number (Table B-2, Appendix B).
For the Area Frame, in the 1982 June Enumerative Survey, South Dakota and Virginia interviewers attempted to obtain Social Security Numbers and Employee Identification Numbers from operators (Part A questionnaire Exhibit A-1, Appendix A). Collection of SSN's and EIN's in this initial effort varied considerably by enumerator. In Virginia collection of these items ranged from a low of 1 completion out of 43 tracts for one enumerator to a high of 46 out of 55 for another (Table B-3, Appendix B). The SSN's and EIN's collected in the Area Frame were then matched against the corresponding fields on the List Frame master. A summary of the results is shown in Table 2.
Table 2. SSN's/EIN's Collected on the 1982 June Enumerative Survey And Matched With
The List Frame, South Dakota And Virginia

<table>
<thead>
<tr>
<th>SSO</th>
<th>Tracts: Area Records With SSN's/Or EIN's</th>
<th>Ag Tracts: Area Records With SSN's/Or EIN's</th>
<th>Percent of: Area Records With SSN's/Or EIN's</th>
<th>Percent of: Area Records With SSN's/Or EIN's</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Dakota</td>
<td>1,057</td>
<td>297</td>
<td>28.1</td>
<td>238 1/</td>
</tr>
<tr>
<td>Virginia</td>
<td>1,082</td>
<td>509</td>
<td>47.0</td>
<td>259 2/</td>
</tr>
</tbody>
</table>

1/ All were matches on SSN
2/ 254 on SSN; 5 on EIN

The Washington D.C. staff reviewed the matches based SSN to determine the correct overlap/nonoverlap (OL/NOL) classification for the area frame records. A breakdown of the 238 matches, (column (D) in Table 2), for South Dakota, compared with the State Statistical Office OL/NOL determination, follows:

<table>
<thead>
<tr>
<th>SSO Original Overlap Determination</th>
<th>Number Of Matches Count</th>
<th>Findings Based Upon SSN Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coded NOL 13</td>
<td></td>
<td>Found as NOL</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Found as OL</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td>Found as inactive record or record in a different class (i.e., NOL)</td>
</tr>
<tr>
<td>Coded OL 193</td>
<td></td>
<td>Found as NOL</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>Found same record that SSO determined as OL</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Found a drop record cross-referenced to same record that SSO determined as OL</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Found a different record that SSO determined as OL (3 were similar but in a different class; 2 were similar, with SSN'S miscoded on LSF)</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Found a drop record not cross-referenced to another record</td>
</tr>
</tbody>
</table>
A review of the data for South Dakota indicated that:

- In no instance did the SSN match identify overlap where the SSO had coded as nonoverlap. Using SSN as an auxiliary method to determine OL/NOL would not result in additional overlap records for South Dakota.

- In some cases, area records were determined to be overlap, but not to the list record indicated by the SSN match. This may indicate a slight discrepancy in the LSF master.

The 1982 June Enumerative Survey overlap/nonoverlap test using SSN/EIN in Virginia revealed five new overlap records which were missed in the regular overlap review procedures. Some of the explanations given for missing these matches in the regular procedures were the following: "Too many similar names on LSF master", "name sort not where expected", "different given name", and "farm name entered differently on LSF." In any event, the match on SSN would have resulted in identifying additional overlap records.

SSN's were asked again in the 1982 December Enumerative Survey (DES) in the two States. A response code box for obtaining the SSN was added to the DES questionnaire so that additional analysis could be done on the types of problems encountered in collecting SSN's. Parts of the DES questionnaire which contain questions on SSN, SSN response code, and regular DES response code are shown as Exhibit A-2 in Appendix A. The specific categories for the SSN response code follow:

<table>
<thead>
<tr>
<th>New SSN</th>
<th>Not Asked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verified SSN</td>
<td>Refused</td>
</tr>
<tr>
<td>Did not know</td>
<td>Inaccessible</td>
</tr>
</tbody>
</table>

A summary of the SSN response codes from the DES is included in Appendix C. SSN's were collected for approximately 40 percent of the tracts in South Dakota and 65 percent in Virginia. This difference in reporting is accounted for in the categories of "Don't know SSN", "SSN not asked", "Refused", and "Inaccessible." Some observations concerning the data in Appendix C are as follows:

- Although South Dakota showed a 15.4 percent refusal rate on SSN, approximately 80 percent of those who refused on SSN also refused on all survey items. In Virginia the refusal rate on SSN was 2.2 percent -- only eight reports.

- In both states there was a relatively large number of reports in the "Don't know", "Not asked", and "Inaccessible" categories. It is interesting to note that enumerators were not "absolutely required" to ask the questions on SSN, and some enumerators definitely took this course of action.
• Operations with a positive number of cattle or hogs tend to show a slightly higher response rate on SSN's than those with no livestock.

• Refusal rates for SSN's tend to be higher for the larger economic classes than for the small ones. However, the refusals on SSN also include regular survey refusals.

• For all operations reporting SSN's, the response rate for operations in the larger economic classes appears to be as high as the smaller operations.

The 1982 DES in South Dakota revealed no new overlap records based on the SSN/EIN match. The match program was run for Virginia and the output provided to the State office for review. The actual percent collected for Virginia is probably higher than the table value (20 percent) because all SSN/EIN's apparently had not been posted to the master at the time of the analysis.

Three additional States -- North Dakota, Ohio, and Tennessee -- were added to the study in 1983. The questions relating to SSN which were asked in the 1983 June Enumerative Survey (JES) are shown in Exhibit A - 3 of Appendix A. One significant change which was made to the 1983 questions and enumerator instructions was the enumerator option of whether to ask the SSN questions. Beginning with the 1983 JES, the questions on SSN were always supposed to be asked, and therefore the SSN response code box no longer contained the "did not ask" category.

The five States in the study were directed to enter all 1983 JES names and addresses into the Area Frame format of the new Mail Maintenance System. Entering names to the new system would put all Area Frame records in a common format for maintenance, allow use of some automated procedures in overlap checking, and make analysis efforts much easier.

After the 1983 JES, the List Frame records and Area Frame records were matched using SSN's and EIN's. A summary of the results of the match is presented in Table 3. The third and fourth categories in Table 3, JES ag tract name and address records with and without SSN/EIN, indicate that SSN's/EIN's were collected for approximately 20 to 70 percent of the records, depending upon the State. The percent for Tennessee is substantially higher than other States because Tennessee has been collecting SSN's on the JES for years. The actual percent collected for Virginia is probably higher than the table value (20 percent) because all SSN's/EIN's apparently had not been posted to the master at the time of the analysis.
In reviewing the records in Table 3 which classified into the latter two categories, matches but not previously determined to be overlap, it is evident that an automated transfer of overlap codes based on SSN/EIN for these records is impossible. The most prevalent causes for overlap determination errors based solely on SSN's are partnership operations. Only one SSN per record is maintained on the LSF; thus, some partnership list records match individual Area Frame records using SSN's, but not using manual procedures. Other causes include incorrect keying of SSN/LSF identification numbers, making list name changes without zeroing out the SSN, dropped list records, etc. Therefore, although the number of matches in these categories may appear alarmingly high, most of the matches do not result in additional overlap determination. However, the match on SSN should prove worthwhile if any additional overlap, or other discrepancies, are discovered.
<table>
<thead>
<tr>
<th>Category</th>
<th>STATE</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N Oak</td>
<td>Ohio</td>
<td>S Oak</td>
<td>Tenn</td>
<td>Va</td>
</tr>
<tr>
<td>Total JES Ag Tracts</td>
<td></td>
<td>1,268</td>
<td>1,218</td>
<td>1,068</td>
<td>1,525</td>
</tr>
<tr>
<td>Total JES Ag Tract N&amp;A Records</td>
<td></td>
<td>1,832</td>
<td>1,715</td>
<td>1,500</td>
<td>1,824</td>
</tr>
<tr>
<td>N&amp;A Records With No SSN/EIN</td>
<td></td>
<td>1,123</td>
<td>958</td>
<td>999</td>
<td>532</td>
</tr>
<tr>
<td>% of N&amp;A Records</td>
<td></td>
<td>61</td>
<td>56</td>
<td>67</td>
<td>29</td>
</tr>
<tr>
<td>N&amp;A Records With SSN/EIN</td>
<td></td>
<td>709</td>
<td>757</td>
<td>501</td>
<td>1,292</td>
</tr>
<tr>
<td>% of N&amp;A Records</td>
<td></td>
<td>39</td>
<td>44</td>
<td>33</td>
<td>71</td>
</tr>
<tr>
<td>N&amp;A Records With SSN/EIN Not Matching List Records</td>
<td></td>
<td>164</td>
<td>443</td>
<td>102</td>
<td>688</td>
</tr>
<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
<td></td>
<td>23</td>
<td>59</td>
<td>20</td>
<td>53</td>
</tr>
<tr>
<td>N&amp;A Records Matching List Records And Previously Determined To Be Overlap</td>
<td></td>
<td>470</td>
<td>215</td>
<td>287</td>
<td>529</td>
</tr>
<tr>
<td>% of N&amp;A Records with SSN/EIN</td>
<td></td>
<td>66</td>
<td>28</td>
<td>58</td>
<td>41</td>
</tr>
<tr>
<td>N&amp;A Records Matching List Records And Previously Determined to Be Overlap With Different List Records</td>
<td></td>
<td>28</td>
<td>11</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>% of N&amp;A Records with SSN/EIN</td>
<td></td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>N&amp;A Records Matching List Records And Not Previously Determined To Be Overlap</td>
<td></td>
<td>47</td>
<td>88</td>
<td>102</td>
<td>42</td>
</tr>
<tr>
<td>% of N&amp;A Records with SSN/EIN</td>
<td></td>
<td>7</td>
<td>12</td>
<td>20</td>
<td>3</td>
</tr>
</tbody>
</table>

1/ JES Ag Tract N&A Record is an Area Frame name and address record associated with a JES agricultural tract. There may be multiple N&A records for a tract if the tract has a farm name or has more than one individual operator.

2/ Does not represent all N&A records with SSN/EIN. All SSN's/EIN's were not posted to Master at time of analysis.
The SSN Response Code (item code 912 on the JES) is of questionable value for other than individually operated tracts, which comprise approximately 85 percent of all agricultural tracts. For partnership tracts, multiple codes would be necessary to properly record the information concerning the collection of SSN's. The problem with one response code box is illustrated by the following question: "What codes are to be entered for a partnership tract when a new SSN is obtained for one partner, the SSN is verified for another partner, and it is inaccessible for another partner"?

A cross tabulation of the 1983 JES Respondent Code versus the regular JES response code for individually operated tracts, by State, is presented in Appendix D. In reviewing these tables and the 1981-83 JES refusal rates (Table 4), asking for SSN's does not appear to have any negative effect on the survey refusal rates. However, some operators refused to give SSN's but did provide other survey information. Also, it is interesting to note that the "inaccessible" category for operators is relatively high in most States. Although one might expect some inaccessible reports for operators, this might be a convenient category for either the operator who doesn't want to refuse outright, or for the enumerator who may not want to ask the question.
The SSN questions on the 1983 December Enumerative Survey (DES) questionnaire were the same as those asked on the June Enumerative Survey (JES). The format of the questionnaire is shown as Exhibit A-4 in Appendix A. The comparison of DES respondent type to SSN response codes, by States, is shown in Tables E-1 through E-5 in Appendix E. These tables indicate the same type of relationship as the 1983 JES; however, the percentage of records with SSN's generally increased, as would be expected.

Table 5 shows the results of matching DES records with List Frame Records, which is also similar to the relationships for the 1983 JES. There are a substantial number of records which match on SSN but were not called overlap by regular procedures. Although most of these "matches" would probably still be considered nonoverlap, the process certainly identifies "matches" which should be reviewed again.
Table 5. Summary of 1983 December Enumerative Survey Record Counts and Results of SSN/EIN Match with List Frame Records -- North Dakota, Ohio, South Dakota, Tennessee, and Virginia

<table>
<thead>
<tr>
<th>Category</th>
<th>N Dak</th>
<th>Ohio</th>
<th>S Dak</th>
<th>Tenn</th>
<th>Va</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total DES Ag Tracts</td>
<td>702</td>
<td>833</td>
<td>760</td>
<td>691</td>
<td>438</td>
</tr>
<tr>
<td>Total DES Ag Tract N&amp;A Records 1/</td>
<td>1,045</td>
<td>1,250</td>
<td>1,074</td>
<td>904</td>
<td>629</td>
</tr>
<tr>
<td>N&amp;A Records With No SSN/EIN</td>
<td>563</td>
<td>580</td>
<td>664</td>
<td>267</td>
<td>297</td>
</tr>
<tr>
<td>% of N&amp;A Records</td>
<td>54</td>
<td>46</td>
<td>62</td>
<td>30</td>
<td>47</td>
</tr>
<tr>
<td>N&amp;A Records With SSN/EIN</td>
<td>482</td>
<td>670</td>
<td>410</td>
<td>637</td>
<td>332</td>
</tr>
<tr>
<td>% of N&amp;A Records</td>
<td>46</td>
<td>54</td>
<td>38</td>
<td>70</td>
<td>53</td>
</tr>
<tr>
<td>N&amp;A Records With SSN/EIN Not Matching List Records</td>
<td>103</td>
<td>410</td>
<td>89</td>
<td>363</td>
<td>200</td>
</tr>
<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
<td>21</td>
<td>61</td>
<td>22</td>
<td>57</td>
<td>60</td>
</tr>
<tr>
<td>N&amp;A Records Matching List Records And Previously Determined To Be Overlap</td>
<td>312</td>
<td>193</td>
<td>238</td>
<td>229</td>
<td>90</td>
</tr>
<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
<td>65</td>
<td>29</td>
<td>58</td>
<td>36</td>
<td>27</td>
</tr>
<tr>
<td>N&amp;A Records Matching List Record And Previously Determined to Be Overlap With Different List Records</td>
<td>20</td>
<td>10</td>
<td>9</td>
<td>20</td>
<td>11</td>
</tr>
<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>N&amp;A Records Matching List Records And Not Previously Determined To Be Overlap</td>
<td>47</td>
<td>57</td>
<td>74</td>
<td>25</td>
<td>31</td>
</tr>
<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
<td>10</td>
<td>9</td>
<td>18</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

1/ DES Ag Tract N&A Record is an Area Frame name and address record associated with a JES agricultural tract. There may be multiple N&A records for a tract if the tract has a farm name or has more than one individual operator.
The study was continued in the same five States for the 1984 June Enumerative Survey. The questionnaire format is shown as Exhibit A-5 in Appendix A, and the comparisons of SSN code to regular response code is shown in Tables F-1 through F-5 in Appendix F. The results of matching Area records to List Frame records is shown in Table 6.

For comparison to an earlier survey, it is probably better to compare JES to JES and DES to DES, rather than JES to DES. Moreover, comparisons of percentages are the most meaningful, especially for North Dakota and Virginia. The record counts in Table 7 and Appendix F for North Dakota and Virginia are much lower than the previous year because the 20 percent new sample had not been added to the Name and Address Master as of August, 1984.

Compared to June 1983, the percentage of records with SSN/EIN (Table 6) increased substantially for all States except Tennessee. However, Tennessee is already at a relatively high level (70 percent) because they have been collecting SSN's for years. The increase in the percentage of records with SSN's is encouraging and demonstrates that progress is being made. The data in the tables included in Appendix F indicated similar relationships to previous surveys for comparisons of SSN Response Code to Respondent Type. Although some SSN refusals continue, it is interesting to note that the overall refusal rates on SSN in most States is lower for 1984 than for 1983. This relationship also generally holds for refusals on SSN alone, i.e., SSN refusals other than regular JES refusals. Overall refusal rates for the JES and DES surveys for 1981 - 1984 are shown in Table 7. Comparison of the data in Table 7 would seem to indicate that collection of SSN's do not adversely affect overall response rate. In fact, overall refusal rates have tended to stay at the same level or actually decreased since the SSN questions were added.
Table 6. Summary of 1984 June Enumerative Survey Record Counts and Results of SSN/EIN Match with List Frame Records -- North Dakota, Ohio, South Dakota, Tennessee, and Virginia

<table>
<thead>
<tr>
<th>Category</th>
<th>STATE</th>
<th>N Dak</th>
<th>Ohio</th>
<th>S Dak</th>
<th>Tenn</th>
<th>Va</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total JES Ag Tracts</td>
<td></td>
<td></td>
<td></td>
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<td>Total JES Ag Tract N&amp;A Records 1/</td>
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</tr>
<tr>
<td>N&amp;A Records With No SSN/EIN</td>
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<tr>
<td>% of N&amp;A Records</td>
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<tr>
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<tr>
<td>% of N&amp;A Records</td>
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<tr>
<td>N&amp;A Records With SSN/EIN Not Matching List Records</td>
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<td></td>
</tr>
<tr>
<td>N&amp;A Records Matching List Records And Previously Determined To Be Overlap</td>
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<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
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<td>% of N&amp;A Records With SSN/EIN</td>
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</tr>
<tr>
<td>N&amp;A Records Matching List Records And Not Previously Determined To Be Overlap</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>% of N&amp;A Records With SSN/EIN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1/ JES Ag Tract N&A Record is an Area Frame name and address record associated with a JES agricultural tract. There may be multiple N&A records for a tract if the tract has a farm name or has more than one individual operator.
Table 7. JES/DES Refusal Rate for Agricultural Tracts -- North Dakota, Ohio, South Dakota, Tennessee and Virginia

<table>
<thead>
<tr>
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<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>81 JES</td>
<td>73</td>
<td>5.82</td>
<td>65</td>
<td>5.41</td>
<td>215</td>
<td>19.96</td>
<td>23</td>
<td>1.57</td>
<td>9</td>
<td>0.88</td>
</tr>
<tr>
<td>82 JES</td>
<td>61</td>
<td>4.84</td>
<td>76</td>
<td>6.57</td>
<td>138</td>
<td>13.21</td>
<td>15</td>
<td>0.99</td>
<td>11</td>
<td>0.99</td>
</tr>
<tr>
<td>83 JES</td>
<td>56</td>
<td>4.43</td>
<td>68</td>
<td>5.58</td>
<td>124</td>
<td>11.74</td>
<td>13</td>
<td>0.85</td>
<td>6</td>
<td>0.55</td>
</tr>
<tr>
<td>84 JES</td>
<td>69</td>
<td>5.43</td>
<td>69</td>
<td>5.76</td>
<td>109</td>
<td>9.82</td>
<td>16</td>
<td>1.04</td>
<td>6</td>
<td>0.58</td>
</tr>
</tbody>
</table>

81 DES 26 5.19 47 5.92 137 20.12 17 2.25 4 0.99
82 DES 38 7.92 52 7.04 116 17.12 11 1.56 4 1.08
83 DES 44 6.27 55 6.60 92 12.11 5 0.72 3 0.68

1/ South Dakota and Virginia started collecting SSN/EIN information during the 1982 JES.
2/ Ohio, North Dakota and Tennessee started collecting SSN/EIN information during the 1983 JES.
REFERENCES

APPENDIX A

EXHIBIT A-1

JUNE 1982
ACREAGE & LIVESTOCK
Enumerative Survey

Response to this survey is voluntary and not required by law. However, cooperation is very important in order to establish crop acreage planted this spring and current livestock numbers. Facts about your farm or ranch will be kept CONFIDENTIAL and used only in combination with similar reports from other producers.

1. Segment Number: ________ Tract Letter: _______
   County: ________________________________

2. I need to make sure that we have your (the operator’s) name and address complete and correct.
   Name of Farm, Ranch or Operation: ________________________________
   Name of Operator: ________________________________
   (Last) ________ (First) ________ (Middle) ________
   Address: ________________________________
   (House or Street) ________________________________
   (City) ________ (State) ________ (Zip) ________
   Phone No.: ________________________________
   (A.C.) ________________________________

3. Is the operation named above: ____________ Enter Code
   Individually operated: ____________
   Partnership or joint: ____________
   Managed Land: ____________
   (For Virginia only. Other States go to Item 4.)

4. Does the operator of this tract live INSIDE or OUTSIDE the segment?
   INSIDE ____________ Enter 5 in Code Box and continue.
   OUTSIDE ____________ Enter 6 in Code Box and go to Page 2.

5. Are there any other persons living in this household who operate a farm or ranch?
   NO ____________ Continue.  YES ____________ Enter Name.  
   (Assign tract on Part 1D, go to Item 6.)

6. Do you operate land under any other name or land arrangement other than the one listed above?
   NO ____________ Continue.  YES ____________ Assign another tract letter for other arrangement.
APPENDIX A

EXHIBIT A-1

SECTION B — PARTNERSHIP OR JOINT OPERATION

Refer to face page to check box. __________

Is operation partnership or joint?

☐ YES • Continue.  ☐ NO • Go to Section D.

Earlier you indicated this operation was a partnership or joint arrangement.

Do all partners share equally in day-to-day decisions?

☐ YES • Consider the oldest as the operator.

☐ NO • The partner that makes most of the day-to-day decisions is the operator.

(Operator shown on face page must be the one making most day-to-day decisions or the oldest. Make corrections if necessary.)

2. Now I would like to verify/identify the other person(s) in this partnership or joint land operating arrangement. (Exclude Landlord-Tenant, cash rent or share crop arrangements.)

<table>
<thead>
<tr>
<th>Name</th>
<th>(Last)</th>
<th>(First)</th>
<th>(Middle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>(Route or Street)</td>
<td>(City)</td>
<td>(State)</td>
</tr>
<tr>
<td>Phone Number</td>
<td>(Area Code)</td>
<td>S.S.N.</td>
<td>______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>(Last)</th>
<th>(First)</th>
<th>(Middle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>(Route or Street)</td>
<td>(City)</td>
<td>(State)</td>
</tr>
<tr>
<td>Phone Number</td>
<td>(Area Code)</td>
<td>S.S.N.</td>
<td>______</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>(Last)</th>
<th>(First)</th>
<th>(Middle)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Address</td>
<td>(Route or Street)</td>
<td>(City)</td>
<td>(State)</td>
</tr>
<tr>
<td>Phone Number</td>
<td>(Area Code)</td>
<td>S.S.N.</td>
<td>______</td>
</tr>
</tbody>
</table>
### DECEMBER 1982
#### ACREAGE & Livestock
#### Enumerative Survey

Responses to this survey are voluntary and not required by law. However, cooperation is very important in order to establish acreage planted to wheat and rye and current livestock and poultry numbers. Facts about your farm or ranch will be kept CONFIDENTIAL and used only in combination with similar reports from other producers.

<table>
<thead>
<tr>
<th>Segment Number:</th>
<th>Tract Letter:</th>
</tr>
</thead>
<tbody>
<tr>
<td>County:</td>
<td></td>
</tr>
</tbody>
</table>

---

**June Respondent if different than operator**

1. I need to make sure that we have your (the operator's) name and address complete and correct.

### Name of Farm, Ranch or Operation:

<table>
<thead>
<tr>
<th>Name of Operator:</th>
<th>E.I.R.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last) (First) (Middle)</td>
<td></td>
</tr>
</tbody>
</table>

| Address: | 
|----------|---|
| (Route or Street) | (City) (State) (Zip) |

### Phone Number: __________

---

### In June, this tract was:

- [ ] Individually operated
- [ ] Jointly operated
- [ ] Managed land

---

### How is this tract operated now? [ ] Individually operated • [ ] Partnership or joint • [ ] Managed Land

(For South Dakota Only. Other States go to Item 3.)

2a. To assist in identifying duplication with our Lists of Farm operators, I would like to record/verify your (and/or any partner) SOCIAL SECURITY NUMBER(S) (SSN). If your operation has an employer ID (EID), this would also be helpful. Disclosure of your social security number is voluntary and is collected under the General Authority of Title 7, Section 3204, of the U.S. Code.

(Enter code): New SSN [ ]-1 Not asked [ ]-4
Verified SSN [ ]-2 Refused [ ]-5
Did not know [ ]-3 Inaccessible [ ]-6

---

### In June the operator lived:

- [ ] Inside [ ] Outside... of this tract.

3. Does the operator now live?

INSIDE or OUTSIDE the tract? [ ] INSIDE [ ] OUTSIDE

(Enter code): 81——1
APPENDIX A

SECTION A — PARTNERSHIP OR JOINT OPERATION

Refer to face page to check box.

Is operation partnership or joint operation?

☐ YES - Continue.

☐ NO - Go to Section B.

Earlier you indicated this operation was a partnership or joint arrangement.

Do all partners share equally in day-to-day decisions?

☐ YES - Consider the oldest as the operator.

☐ NO - The partner that makes most of the day-to-day decisions is the operator.

Operator shown on face page must be the one making most day-to-day decisions or the oldest. Make corrections if necessary.

2. Now I would like to (verify/identify) the other person(s) in this partnership or joint land operating arrangement.
   (exclude Landlord-Tenant, cash rent or share crop arrangements.)

<table>
<thead>
<tr>
<th>Name (Last, First Middle)</th>
<th>Address (Route or Street)</th>
<th>Phone (City - State - Zip Code)</th>
<th>Number (Area Code)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S.B.N.</th>
<th>ID</th>
<th>CATTLE</th>
<th>MOOSES</th>
<th>CHICKENS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td>626</td>
<td>625</td>
<td>045</td>
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<tr>
<td></td>
<td>3</td>
<td>626</td>
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<td></td>
<td>4</td>
<td>627</td>
<td>627</td>
<td>047</td>
</tr>
</tbody>
</table>

21
SECTION N — RESPONDENT CODE

Check and enter Respondent Code below.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Operator</td>
</tr>
<tr>
<td>2</td>
<td>Spouse</td>
</tr>
<tr>
<td>3</td>
<td>Other (Specify)</td>
</tr>
<tr>
<td>4</td>
<td>Observed Date Only - Refusal</td>
</tr>
<tr>
<td>5</td>
<td>Observed Date Only - No Respondent</td>
</tr>
</tbody>
</table>

Enter name of respondent if not the operator or spouse. ____________________________

CONCLUDE INTERVIEW

Enumerator __________________________ Date __________________________

OFFICE USE

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>095</td>
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</tr>
<tr>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>
JUNE 1983
ACREAGE & LIVESTOCK
Enumerative Survey

<table>
<thead>
<tr>
<th>State</th>
<th>District</th>
<th>Segment</th>
<th>Tract</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>80000</td>
<td></td>
</tr>
</tbody>
</table>

Segment Number: __________  Tract Letter: __________  County: _______________________

### OPERATION OR PARTNERSHIP NAME

<table>
<thead>
<tr>
<th>LSF ID</th>
<th>E.I.R.</th>
<th>Cattle</th>
<th>Hogs</th>
<th>Rice</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0637</td>
<td>063</td>
<td>063</td>
</tr>
</tbody>
</table>

Operation or Partnership Name Sticker

1. I need to make sure that we have your (the operator's) name and address complete and correct.

   Name of Farm, Ranch or Operation: ____________________________________________

   Name of Operator: ____________________________________________________________
   (Last)  (First)  (Middle)  Operator Name Sticker

   Address: ____________________________________________________________
   (Route or Street)

   (City)  (State)  (Zip)

   Phone No. ( ) ______________________
   (Area Code)

### OPERATOR NAME

<table>
<thead>
<tr>
<th>LSF ID</th>
<th>E.I.R.</th>
<th>Cattle</th>
<th>Hogs</th>
<th>Rice</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td>0637</td>
<td>063</td>
<td>063</td>
</tr>
</tbody>
</table>

2. Is the operation named above:
   - [ ] Individually operated - 1
   - [ ] Partnership or joint - 2
   - [ ] Managed Land - 3
   - Enter Code: 064

3. Does the operator of this tract live INSIDE or OUTSIDE the segment?
   - [ ] INSIDE - Enter 5 in Code Box and continue.
   - [ ] OUTSIDE - Enter 6 in Code Box and go to Page 2.
   - Enter Code: 81  1

4. Are there any other persons living in this household who operate a farm or ranch?
   - [ ] NO - Continue.
   - [ ] YES - Enter Name______________________________
   (Assign tract on Part ID, go to Item 5.)

5. Do you operate land under any other name or land arrangement other than the one listed above?
   - [ ] NO - Continue.
   - [ ] YES - Assign another tract letter for other arrangement.
### SECTION B – PARTNERSHIP OR JOINT OPERATION

Refer to face page to check box.

Is operation partnership or joint land operating arrangement?

☐ YES - Continue.  ☐ NO - Go to Section D.

Earlier you indicated this operation was a partnership or joint arrangement.

1. Do all partners share equally in day-to-day decisions?

☐ YES - Consider the oldest as the operator.

☐ NO - The partner that makes most of the day-to-day decisions is the operator.

(Operator shown on face page must be the one making most day-to-day decisions or the oldest. Make corrections if necessary.)

2. Now I would like to verify/identify the other person(s) in this partnership or joint land operating arrangement. (Exclude Landlord-Tenant, cash rent or share crop arrangements.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>LSF ID</th>
<th>B.U.N.</th>
<th>CATTLE</th>
<th>HOGS</th>
<th>RICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Last)</td>
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<td>(Route or Street)</td>
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<td></td>
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<td>(City)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>ID</td>
<td>E.U.I.</td>
<td></td>
<td></td>
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<td>625</td>
<td>666</td>
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</tbody>
</table>

<table>
<thead>
<tr>
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<th>Phone</th>
<th>LSF ID</th>
<th>B.U.N.</th>
<th>CATTLE</th>
<th>HOGS</th>
<th>RICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Last)</td>
<td>(First)</td>
<td>(Middle)</td>
<td>(Route or Street)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(City)</td>
<td>(State)</td>
<td>(Zip Code)</td>
<td>(Area Code)</td>
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<td></td>
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</tr>
<tr>
<td>3</td>
<td>ID</td>
<td>E.U.I.</td>
<td></td>
<td></td>
<td>536</td>
<td>625</td>
<td>666</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone</th>
<th>LSF ID</th>
<th>B.U.N.</th>
<th>CATTLE</th>
<th>HOGS</th>
<th>RICE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Last)</td>
<td>(First)</td>
<td>(Middle)</td>
<td>(Route or Street)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(City)</td>
<td>(State)</td>
<td>(Zip Code)</td>
<td>(Area Code)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>ID</td>
<td>E.U.I.</td>
<td></td>
<td></td>
<td>537</td>
<td>627</td>
<td>667</td>
</tr>
</tbody>
</table>
APPENDIX A

EXHIBIT A-3

SECTION N — S.S.N.
(For Tennessee and Virginia Only)

To assist in identifying duplication with our lists of farm operators, I would like to (record/verify your
(and/or any partners) SOCIAL SECURITY NUMBER(S) (SSN). If your operation has an employer ID
(EID), this would also be helpful. Disclosure of your social security number is voluntary and is collected
under the General Authority of Title 7, Section 2204, of the U.S. Code.

(Check and enter code):  
☐ New SSN# .................. 1  
☐ Verified SSN# ............. 2  
☐ Non-Verified SSN# ......... 3  
☐ Inaccessible ............... 4  
☐ Refused .................... 5

Enter Code

SECTION O — RESPONDENT CODE

Check and enter respondent code below.

Check Code

Respondent Code:  
Operator/Manager ............... 1  
Spouse .......................... 2  
Other (Specify) ................. 3  
Observed Data Only - Refusal .... 4  
Observed Data Only - No Respondent  5

Enter name of respondent if not the operator or spouse.

CONCLUDE INTERVIEW

 Enumerator ___________________________ Date ___________________________

NOTES:

Office Use

000

100
DECEMBER 1983
Acreage & Livestock
ENUMERATIVE SURVEY

Response to this survey is voluntary and not required by law. However, cooperation is very important in order to establish acreage planted to wheat and rye and current livestock and poultry numbers. Facts about your farm or ranch will be kept CONFIDENTIAL and used only in combination with similar reports from other producers.

Segment Number: ____________  Tract Letter: ____________  County: ____________

OPERATION OR PARTNERSHIP NAME

<table>
<thead>
<tr>
<th>Segment Number</th>
<th>Tract Letter</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td>0000</td>
<td>H3</td>
<td></td>
</tr>
</tbody>
</table>

JUNGE RESPONDENT: if different than operator

1. I need to make sure that we have your
   (the operator's) name and address
   complete and correct.

Name of
Farm, Ranch
or Operation:

Name of
Operator:
   (Last) (First) (Middle)

Address:
   (Route or Street)
   (City) (State) (Zip)

Phone
Number: ( )

OPERATOR NAME

1  LSF ID  E.I.R.  CATTLE  HOGS  CHICKENS  SHEEP
   004   004   004

In June, this tract was:
   □ - Individually operated  □ - Jointly operated  □ - Managed land

2. How is this tract operated now?
   □ - Individually operated - □ - Partnership or Joint - 30 
   ENTER CODE 845

In June the operator lived:
   □ - Inside  □ - Outside . . . of this tract.

3. Does the operator now live
   INSIDE or OUTSIDE the tract?
   □ - INSIDE - 8
   □ - OUTSIDE - 8
   ENTER CODE 81

26
APPENDIX A

EXHIBIT A-4

SECTION A — PARTNERSHIP OR JOINT OPERATION

Refer to face page to check box.

Is operation partnership or joint?

☐ YES - Continue.

☐ NO - Go to Section B.

Earlier you indicated this operation was a partnership or joint arrangement.

1. Do all partners share equally in day-to-day decisions?
   ☐ YES - Consider the oldest as the operator.
   ☐ NO - The partner that makes most of the day-to-day decisions is the operator.
   Operator shown on face page must be the one making most day-to-day decisions or the oldest. Make corrections if necessary.

2. Now I would like to (verify/identify) the other person(s) in this partnership or joint land operating arrangement.
   (exclude Landlord-Tenant, cash rent or share crop arrangements.)

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last, First, Middle)</td>
<td>(Route or Street)</td>
<td>(Area Code)</td>
</tr>
<tr>
<td></td>
<td>(City — State — Zip Code)</td>
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<td></td>
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</table>

<table>
<thead>
<tr>
<th>S.S.N.</th>
<th>LSP ID</th>
<th>CATTLE</th>
<th>HOGS</th>
<th>CHICKENS</th>
<th>SHEEP</th>
</tr>
</thead>
<tbody>
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<td>225</td>
<td>945</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last, First, Middle)</td>
<td>(Route or Street)</td>
<td>(Area Code)</td>
</tr>
<tr>
<td></td>
<td>(City — State — Zip Code)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S.S.N.</th>
<th>LSP ID</th>
<th>CATTLE</th>
<th>HOGS</th>
<th>CHICKENS</th>
<th>SHEEP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>225</td>
<td>225</td>
<td>945</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Phone Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Last, First, Middle)</td>
<td>(Route or Street)</td>
<td>(Area Code)</td>
</tr>
<tr>
<td></td>
<td>(City — State — Zip Code)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S.S.N.</th>
<th>LSP ID</th>
<th>CATTLE</th>
<th>HOGS</th>
<th>CHICKENS</th>
<th>SHEEP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>227</td>
<td>227</td>
<td>847</td>
<td></td>
</tr>
</tbody>
</table>
SECTION O — S.S.N.

(TENNESSEE ONLY)

To assist in identifying duplication with our lists of farm operators, I would like to record/verify your (and/or any partners) SOCIAL SECURITY NUMBER(S) (SSN). If your operation has an employer ID (EID), this would also be helpful. Disclosure of your social security number is voluntary and is collected under the General Authority of Title 7, Section 2204, of the U.S. Code.

Refer to Face Page/page 2 to record/verify EID/SSN (S).

(Choose and enter code):

- New SSN# .................1
- Verified SSN# ............2
- Non-Verified SSN# ........3
- Inaccessible .............4
- Refused ..................5
JUNE 1984
ACREAGE & LIVESTOCK
Enumerative Survey

Operation or Partnership Name — StickerVerified ☑

1. I need to make sure that we have your (the
operator's) name and address complete and correct.

Name of
Farm, Ranch
or Operation:

Name of
Operator:
(First) (Middle) (Last)

Operator Name — Sticker Verified ☑

Address:
(Route or Street)

(City) (State) (Zip)

Phone No. ( ) —
(Area Code)

2. Is the operation named above:
☑ Individually operated -□ Partnership or joint -□ Managed Land -□
Enter Code

3. Does the operator of this tract live INSIDE or OUTSIDE the segment?

☐ INSIDE — Enter 5 in Code Box and continue.

☐ OUTSIDE — Enter 6 in Code Box and go to Page 2.

4. Are there any other persons living in this household who operate a farm or ranch?

☐ NO — Continue. ☐ YES — Enter Name
(Assign tract on Part ID, go to Item 3.)

5. Do you operate land under any other name or land arrangement other than the one listed above?

☐ NO — Continue. ☐ YES — Assign another tract letter for other arrangement.
APPENDIX A

SECTION B — PARTNERSHIP OR JOINT OPERATION

Refer to face page to check box.

Is operation partnership or joint land operating arrangement?

☐ YES - Continue. ☐ NO - Go to Section D.

Earlier you indicated this operation was a partnership or joint arrangement.

1. Do all partners share equally in day-to-day decisions?

☐ YES - Consider the oldest as the operator.
☐ NO - The partner that makes most of the day-to-day decisions is the operator.

(Operator shown on face page must be the one making most day-to-day decisions or the oldest. Make corrections if necessary.)

2. Now I would like to (verify/identify) the other person(s) in this partnership or joint land operating arrangement.
(Exclude Landlord-Tenant, cash rent or share crop arrangements.)

<table>
<thead>
<tr>
<th>Partner Name — Sticker Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (First) (Middle) (Last)</td>
</tr>
<tr>
<td>Address (Route or Street)</td>
</tr>
<tr>
<td>(City) (State) (Zip Code)</td>
</tr>
<tr>
<td>Phone (Area Code)</td>
</tr>
<tr>
<td>Total Partners</td>
</tr>
<tr>
<td>Total Partners (Including operator)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partner Name — Sticker Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (First) (Middle) (Last)</td>
</tr>
<tr>
<td>Address (Route or Street)</td>
</tr>
<tr>
<td>(City) (State) (Zip Code)</td>
</tr>
<tr>
<td>Phone (Area Code)</td>
</tr>
<tr>
<td>2 LSP ID</td>
</tr>
<tr>
<td>S.S.N.</td>
</tr>
<tr>
<td>ISN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partner Name — Sticker Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (First) (Middle) (Last)</td>
</tr>
<tr>
<td>Address (Route or Street)</td>
</tr>
<tr>
<td>(City) (State) (Zip Code)</td>
</tr>
<tr>
<td>Phone (Area Code)</td>
</tr>
<tr>
<td>3 LSP ID</td>
</tr>
<tr>
<td>S.S.N.</td>
</tr>
<tr>
<td>ISN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partner Name — Sticker Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name (First) (Middle) (Last)</td>
</tr>
<tr>
<td>Address (Route or Street)</td>
</tr>
<tr>
<td>(City) (State) (Zip Code)</td>
</tr>
<tr>
<td>Phone (Area Code)</td>
</tr>
<tr>
<td>4 LSP ID</td>
</tr>
<tr>
<td>S.S.N.</td>
</tr>
<tr>
<td>ISN</td>
</tr>
</tbody>
</table>
SECTION 0 — S.S.N.

To assist in identifying duplication with our list of farm operators, I would like to (record/verify your (and/or any partners) SOCIAL SECURITY NUMBER(S) (EIN/SSN). If your operation has an employer ID (EIN), this would also be helpful. Disclosure of your social security number is voluntary and is collected under the General Authority of Title 7, Section 2204, of the U.S. Code. Refer to Face Page/Section B to (record/verify EIN/SSN number(s).

(Check and enter code):  
- New SSN# ........................................ 1
- Verified SSN# .................................... 2
- Non-Verified SSN# ................................ 3
- Inaccessible ....................................... 4
- Refused ............................................ 5

SECTION Q — RESPONDENT CODE

Check and enter respondent code below.

<table>
<thead>
<tr>
<th>Respondent Code:</th>
<th>Check Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator/Manager</td>
<td>□ 1</td>
</tr>
<tr>
<td>Spouse</td>
<td>□ 2</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>□ 3</td>
</tr>
<tr>
<td>Observed Date Only - Refusal</td>
<td>□ 4</td>
</tr>
<tr>
<td>Observed Date Only - No Respondent</td>
<td>□ 5</td>
</tr>
</tbody>
</table>

Enter name of respondent if not the operator or spouse. ________________________________

CONCLUDE INTERVIEW

Enumeraror ___________________________ Date ___________________________

NOTES:

Office Use

100
APPENDIX B

Table B-1. County Estimates Survey Sample From List Frame Master, Virginia, May 1982

<table>
<thead>
<tr>
<th>Sample Description</th>
<th>Sample Size</th>
<th>Mail-out Tabulated No.</th>
<th>Mail-out % 1/</th>
<th>Not Tabulated No.</th>
<th>Not Tabulated % 1/</th>
<th>Total No.</th>
<th>Total % 1/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>8,250</td>
<td>8,220</td>
<td>2,149</td>
<td>1,180</td>
<td>14.3</td>
<td>3,329</td>
<td>40.5</td>
</tr>
<tr>
<td>No Social Security</td>
<td>8,250</td>
<td>8,211</td>
<td>2,103</td>
<td>1,289</td>
<td>15.7</td>
<td>3,392</td>
<td>41.3</td>
</tr>
<tr>
<td>Total</td>
<td>16,500</td>
<td>16,431</td>
<td>4,252</td>
<td>2,469</td>
<td>15.0</td>
<td>6,721</td>
<td>40.9</td>
</tr>
</tbody>
</table>

1/ Percent of mailout

Table B-2. Social Security Numbers And Their Affect On Response Rates To The 1982 County Estimates Survey, Virginia, May 1982

<table>
<thead>
<tr>
<th>Group</th>
<th>Mail-out Total</th>
<th>Soc. Sec. # Reported</th>
<th>Soc. Sec. # Blank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Security</td>
<td>8,211</td>
<td>2,149</td>
<td>1,608</td>
</tr>
</tbody>
</table>

1/ Percent of total response.
APPENDIX B

Table B-3. Collection Of Social Security No.'s From 1982 June Enumerative Survey, Virginia

<table>
<thead>
<tr>
<th>Enumerator :</th>
<th>Tracts Interviewed</th>
<th>SSN Reported</th>
<th>Percent of Tracts Reporting SSN</th>
<th>Didn't Know SSN</th>
<th>Refusal</th>
<th>Blank Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>33</td>
<td>21</td>
<td>64</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>19</td>
<td>6</td>
<td>32</td>
<td>-</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>3</td>
<td>60</td>
<td>21</td>
<td>35</td>
<td>34</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>67</td>
<td>45</td>
<td>67</td>
<td>-</td>
<td>-</td>
<td>22</td>
</tr>
<tr>
<td>5</td>
<td>46</td>
<td>29</td>
<td>63</td>
<td>11</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>50</td>
<td>24</td>
<td>48</td>
<td>-</td>
<td>-</td>
<td>26</td>
</tr>
<tr>
<td>7</td>
<td>39</td>
<td>27</td>
<td>69</td>
<td>4</td>
<td>-</td>
<td>8</td>
</tr>
<tr>
<td>8</td>
<td>22</td>
<td>8</td>
<td>36</td>
<td>-</td>
<td>-</td>
<td>14</td>
</tr>
<tr>
<td>9</td>
<td>72</td>
<td>33</td>
<td>46</td>
<td>21</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>10</td>
<td>61</td>
<td>33</td>
<td>54</td>
<td>25</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>31</td>
<td>26</td>
<td>84</td>
<td>-</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>12</td>
<td>29</td>
<td>13</td>
<td>45</td>
<td>3</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>13</td>
<td>63</td>
<td>21</td>
<td>33</td>
<td>17</td>
<td>-</td>
<td>25</td>
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<tr>
<td>14</td>
<td>44</td>
<td>20</td>
<td>45</td>
<td>12</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>15</td>
<td>40</td>
<td>1</td>
<td>3</td>
<td>-</td>
<td>3</td>
<td>36</td>
</tr>
<tr>
<td>16</td>
<td>43</td>
<td>1</td>
<td>2</td>
<td>8</td>
<td>1</td>
<td>33</td>
</tr>
<tr>
<td>17</td>
<td>92</td>
<td>25</td>
<td>27</td>
<td>-</td>
<td>1</td>
<td>66</td>
</tr>
<tr>
<td>18</td>
<td>22</td>
<td>6</td>
<td>27</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>20</td>
<td>55</td>
<td>46</td>
<td>84</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>21</td>
<td>101</td>
<td>31</td>
<td>31</td>
<td>-</td>
<td>1</td>
<td>69</td>
</tr>
<tr>
<td>22</td>
<td>4</td>
<td>3</td>
<td>75</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>23</td>
<td>22</td>
<td>9</td>
<td>41</td>
<td>-</td>
<td>-</td>
<td>13</td>
</tr>
<tr>
<td>24</td>
<td>15</td>
<td>8</td>
<td>53</td>
<td>2</td>
<td>-</td>
<td>5</td>
</tr>
<tr>
<td>25</td>
<td>43</td>
<td>8</td>
<td>19</td>
<td>34</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>1,074</td>
<td>466</td>
<td>43</td>
<td>178</td>
<td>15</td>
<td>415</td>
</tr>
</tbody>
</table>
# APPENDIX C

Table C-1. Summary Of SSN Responses, 1982 December Enumerative Survey, South Dakota and Virginia

<table>
<thead>
<tr>
<th>Category</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Reports</td>
<td>% of Total</td>
<td>No. Reports</td>
<td>% of Total</td>
</tr>
<tr>
<td>New SSN's obtained</td>
<td>107</td>
<td>15.8</td>
<td>85</td>
<td>22.8</td>
</tr>
<tr>
<td>Verified SSN's</td>
<td>161</td>
<td>23.8</td>
<td>159</td>
<td>42.7</td>
</tr>
<tr>
<td>Total Records with SSN</td>
<td>268</td>
<td>39.6</td>
<td>244</td>
<td>65.6</td>
</tr>
<tr>
<td>Don't Know SSN</td>
<td>168</td>
<td>24.8</td>
<td>37</td>
<td>9.9</td>
</tr>
<tr>
<td>SSN Not Asked</td>
<td>66</td>
<td>9.8</td>
<td>23</td>
<td>6.2</td>
</tr>
<tr>
<td>SSN Refused</td>
<td>104</td>
<td>15.4</td>
<td>8</td>
<td>2.2</td>
</tr>
<tr>
<td>SSN Inaccessible</td>
<td>70</td>
<td>10.4</td>
<td>60</td>
<td>16.1</td>
</tr>
<tr>
<td>Total Ag Tracts</td>
<td>678</td>
<td>100.0</td>
<td>372</td>
<td>100.0</td>
</tr>
</tbody>
</table>

SSN Refusals by Survey

<table>
<thead>
<tr>
<th>Response Code</th>
<th>South Dakota</th>
<th>Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Operator</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>2 - Spouse</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3 - Other</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>4 - Refusal</td>
<td>82</td>
<td>2</td>
</tr>
<tr>
<td>5 - Inaccessible</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>104</td>
<td>8</td>
</tr>
</tbody>
</table>

SSN Inaccessible by Survey

<table>
<thead>
<tr>
<th>Response Code</th>
<th>South Dakota</th>
<th>Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Operator</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>2 - Spouse</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>3 - Other</td>
<td>10</td>
<td>38</td>
</tr>
<tr>
<td>4 - Refusal</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>5 - Inaccessible</td>
<td>43</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>60</td>
</tr>
</tbody>
</table>
### Table C-2. SSN Refusals And Inaccessibles By Operation Type, 1982 December
**Enumerative Survey, South Dakota and Virginia**

<table>
<thead>
<tr>
<th>Category</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Reports</td>
<td>% of Total</td>
<td>No. Reports</td>
<td>% of Total</td>
</tr>
<tr>
<td>Refusal - Individual</td>
<td>84</td>
<td>15.3%</td>
<td>7</td>
<td>2.2%</td>
</tr>
<tr>
<td>- Partnership</td>
<td>20</td>
<td>16.0%</td>
<td>1</td>
<td>2.2%</td>
</tr>
<tr>
<td>- Managed</td>
<td>0</td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total Refusals</td>
<td>104</td>
<td>15.4%</td>
<td>8</td>
<td>2.2%</td>
</tr>
<tr>
<td>Inaccessible - Individual</td>
<td>56</td>
<td>10.2%</td>
<td>52</td>
<td>16.6%</td>
</tr>
<tr>
<td>- Partnership</td>
<td>14</td>
<td>11.2%</td>
<td>6</td>
<td>13.3%</td>
</tr>
<tr>
<td>- Managed</td>
<td>0</td>
<td></td>
<td>2</td>
<td>15.4%</td>
</tr>
<tr>
<td>Total Inaccessible</td>
<td>70</td>
<td>10.4%</td>
<td>60</td>
<td>16.1%</td>
</tr>
</tbody>
</table>

Positive SSN Responses by Operation Type:

<table>
<thead>
<tr>
<th>Type</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>222</td>
<td>40.5%</td>
<td>205</td>
<td>65.3%</td>
</tr>
<tr>
<td>Partnership</td>
<td>45</td>
<td>36.0%</td>
<td>33</td>
<td>73.3%</td>
</tr>
<tr>
<td>Managed</td>
<td>1</td>
<td>33.3%</td>
<td>6</td>
<td>46.1%</td>
</tr>
<tr>
<td>Total</td>
<td>268</td>
<td>39.6%</td>
<td>244</td>
<td>65.6%</td>
</tr>
</tbody>
</table>

Positive SSN Responses By Presence of Cattle or Hog Data:

<table>
<thead>
<tr>
<th>Presence</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero Hogs</td>
<td>225</td>
<td>39.0%</td>
<td>205</td>
<td>63.9%</td>
</tr>
<tr>
<td>Positive Hogs</td>
<td>43</td>
<td>43.4%</td>
<td>39</td>
<td>76.5%</td>
</tr>
<tr>
<td>Zero Cattle</td>
<td>90</td>
<td>32.4%</td>
<td>142</td>
<td>62.8%</td>
</tr>
<tr>
<td>Positive Cattle</td>
<td>178</td>
<td>44.7%</td>
<td>102</td>
<td>69.9%</td>
</tr>
</tbody>
</table>

1/ The percentages represent the percentage each category represents of the total reports within that category. For example, the percent refusals for individuals is calculated by dividing the individual refusals by total individuals.
### APPENDIX C.

Table C-3. Refusals On SSN By Sales Index, 1982 December Enumerative Survey, South Dakota And Virginia

<table>
<thead>
<tr>
<th>Category</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Reports</td>
<td>% of Total</td>
<td>No. Reports</td>
<td>% of Total</td>
</tr>
<tr>
<td>$1,000 - $2,499</td>
<td>84</td>
<td>16.4</td>
<td>6</td>
<td>2.3</td>
</tr>
<tr>
<td>2,500 - 4,999</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5,000 - 9,999</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>7.7</td>
</tr>
<tr>
<td>10,000 - 19,999</td>
<td>1</td>
<td>3.7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>20,000 - 39,999</td>
<td>3</td>
<td>9.6</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>40,000 - 99,999</td>
<td>8</td>
<td>14.3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>100,000 - 199,999</td>
<td>6</td>
<td>20.7</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>200,000 - 499,999</td>
<td>2</td>
<td>25.0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>500,000 +</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>104</td>
<td>15.4</td>
<td>8</td>
<td>2.2</td>
</tr>
</tbody>
</table>

Inaccessibles on SSN by JES Sales Index:

<table>
<thead>
<tr>
<th>Category</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Reports</td>
<td></td>
<td>No. Reports</td>
<td></td>
</tr>
<tr>
<td>$1,000 - $2,499</td>
<td>61</td>
<td>11.9</td>
<td>47</td>
<td>18.0</td>
</tr>
<tr>
<td>2,500 - 4,999</td>
<td>1</td>
<td>25.0</td>
<td>1</td>
<td>5.9</td>
</tr>
<tr>
<td>5,000 - 9,999</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10,000 - 19,999</td>
<td>2</td>
<td>6.4</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>20,000 - 39,999</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>9.1</td>
</tr>
<tr>
<td>40,000 - 99,999</td>
<td>2</td>
<td>3.6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>100,000 - 199,999</td>
<td>4</td>
<td>13.8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>200,000 - 499,999</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>500,000 +</td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>70</td>
<td>10.4</td>
<td>51</td>
<td>15.5</td>
</tr>
</tbody>
</table>

Positive SSN Responses by JES Sales Index:

<table>
<thead>
<tr>
<th>Category</th>
<th>South Dakota</th>
<th></th>
<th>Virginia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No. Reports</td>
<td></td>
<td>No. Reports</td>
<td></td>
</tr>
<tr>
<td>Less than $999</td>
<td>1</td>
<td>50.0</td>
<td>26</td>
<td>60.5</td>
</tr>
<tr>
<td>$1,000 - $2,499</td>
<td>188</td>
<td>36.7</td>
<td>166</td>
<td>63.6</td>
</tr>
<tr>
<td>2,500 - 4,999</td>
<td>2</td>
<td>50.0</td>
<td>12</td>
<td>70.6</td>
</tr>
<tr>
<td>5,000 - 9,999</td>
<td>3</td>
<td>50.0</td>
<td>11</td>
<td>84.6</td>
</tr>
<tr>
<td>10,000 - 19,999</td>
<td>18</td>
<td>56.7</td>
<td>5</td>
<td>71.4</td>
</tr>
<tr>
<td>20,000 - 39,999</td>
<td>14</td>
<td>45.2</td>
<td>7</td>
<td>63.6</td>
</tr>
<tr>
<td>40,000 - 99,999</td>
<td>24</td>
<td>42.9</td>
<td>14</td>
<td>100.0</td>
</tr>
<tr>
<td>100,000 - 199,999</td>
<td>14</td>
<td>48.3</td>
<td>2</td>
<td>66.7</td>
</tr>
<tr>
<td>200,000 - 999,999</td>
<td>3</td>
<td>37.5</td>
<td>1</td>
<td>50.0</td>
</tr>
<tr>
<td>500,000 +</td>
<td>1</td>
<td>100.0</td>
<td>0</td>
<td>0</td>
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<tr>
<td><strong>Total</strong></td>
<td>268</td>
<td>39.6</td>
<td>244</td>
<td>65.6</td>
</tr>
</tbody>
</table>

36
APPENDIX D

Table D-1. 1983 JES Respondent Versus SSN Response Type For Individually Operated Tracts, North Dakota

<table>
<thead>
<tr>
<th>SSN Response Type</th>
<th>Operator</th>
<th>Spouse</th>
<th>Other</th>
<th>Refusal</th>
<th>No Respondent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JES: New</td>
<td>517</td>
<td>47</td>
<td>17</td>
<td>2</td>
<td>1</td>
<td>584</td>
</tr>
<tr>
<td>Verified: Verified</td>
<td>27</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>:Verified: Inaccessible</td>
<td>2</td>
<td>0.09</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2</td>
</tr>
<tr>
<td>:Refusal: Total</td>
<td>110</td>
<td>24</td>
<td>140</td>
<td>10</td>
<td>9</td>
<td>341</td>
</tr>
<tr>
<td>%</td>
<td>48.14</td>
<td>4.38</td>
<td>1.58</td>
<td>0.19</td>
<td>0.19</td>
<td>54.38</td>
</tr>
</tbody>
</table>

Table D-2. 1983 JES Respondent Versus SSN Response Type For Individually Operated Tracts, Ohio

<table>
<thead>
<tr>
<th>SSN Response Type</th>
<th>Operator</th>
<th>Spouse</th>
<th>Other</th>
<th>Refusal</th>
<th>No Respondent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>JES: New</td>
<td>576</td>
<td>61</td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>648</td>
</tr>
<tr>
<td>Verified: Verified</td>
<td>1</td>
<td>0.10</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1</td>
</tr>
<tr>
<td>:Verified: Inaccessible</td>
<td>1</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1</td>
</tr>
<tr>
<td>:Refusal: Total</td>
<td>100</td>
<td>65</td>
<td>61</td>
<td>9</td>
<td>16</td>
<td>251</td>
</tr>
<tr>
<td>%</td>
<td>55.70</td>
<td>5.90</td>
<td>0.97</td>
<td>0.19</td>
<td>0.00</td>
<td>62.67</td>
</tr>
</tbody>
</table>

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### APPENDIX D

Table D-3. **1983 JES Respondent Versus SSN Response Type For Individually Operated Tracts, South Dakota**

<table>
<thead>
<tr>
<th>JES</th>
<th>SSN Response Type</th>
<th>Non-</th>
<th>New</th>
<th>Verified</th>
<th>Verified</th>
<th>Inaccessible:</th>
<th>Respondent</th>
<th>SSN</th>
<th>SSN</th>
<th>SSN</th>
<th>Refusal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator #</td>
<td>144</td>
<td>189</td>
<td>2</td>
<td>188</td>
<td>9</td>
<td>532</td>
<td>%</td>
<td>16.49</td>
<td>21.65</td>
<td>0.23</td>
<td>21.53</td>
<td>1.03</td>
</tr>
<tr>
<td>%</td>
<td>16.49</td>
<td>21.65</td>
<td>0.23</td>
<td>21.53</td>
<td>1.03</td>
<td>60.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse #</td>
<td>9</td>
<td>14</td>
<td>0</td>
<td>44</td>
<td>4</td>
<td>71</td>
<td>%</td>
<td>1.03</td>
<td>1.60</td>
<td>0.00</td>
<td>5.04</td>
<td>0.46</td>
</tr>
<tr>
<td>%</td>
<td>1.03</td>
<td>1.60</td>
<td>0.00</td>
<td>5.04</td>
<td>0.46</td>
<td>8.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other #</td>
<td>2</td>
<td>2</td>
<td>7</td>
<td>85</td>
<td>2</td>
<td>98</td>
<td>%</td>
<td>0.23</td>
<td>0.23</td>
<td>0.80</td>
<td>9.74</td>
<td>0.23</td>
</tr>
<tr>
<td>%</td>
<td>0.23</td>
<td>0.23</td>
<td>0.80</td>
<td>9.74</td>
<td>0.23</td>
<td>11.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refusal #</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>14</td>
<td>85</td>
<td>104</td>
<td>%</td>
<td>0.00</td>
<td>0.34</td>
<td>0.23</td>
<td>1.60</td>
<td>9.74</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.34</td>
<td>0.23</td>
<td>1.60</td>
<td>9.74</td>
<td>11.91</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No respondent</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>58</td>
<td>6</td>
<td>68</td>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.46</td>
<td>6.64</td>
<td>0.69</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.46</td>
<td>6.64</td>
<td>0.69</td>
<td>7.79</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total #</td>
<td>155</td>
<td>208</td>
<td>15</td>
<td>389</td>
<td>106</td>
<td>873</td>
<td>%</td>
<td>17.75</td>
<td>23.83</td>
<td>1.72</td>
<td>44.56</td>
<td>12.14</td>
</tr>
<tr>
<td>%</td>
<td>17.75</td>
<td>23.83</td>
<td>1.72</td>
<td>44.56</td>
<td>12.14</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table D-4. **1983 JES Response Type Versus SSN For Individually Operated Tracts, Tennessee**

<table>
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<tr>
<th>JES</th>
<th>SSN Response Type</th>
<th>Non-</th>
<th>New</th>
<th>Verified</th>
<th>Verified</th>
<th>Inaccessible:</th>
<th>Respondent</th>
<th>SSN</th>
<th>SSN</th>
<th>SSN</th>
<th>Refusal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator #</td>
<td>286</td>
<td>169</td>
<td>348</td>
<td>54</td>
<td>7</td>
<td>864</td>
<td>%</td>
<td>21.01</td>
<td>12.42</td>
<td>25.57</td>
<td>3.97</td>
<td>0.51</td>
</tr>
<tr>
<td>%</td>
<td>21.01</td>
<td>12.42</td>
<td>25.57</td>
<td>3.97</td>
<td>0.51</td>
<td>63.48</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse #</td>
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<td>255</td>
<td>%</td>
<td>4.48</td>
<td>3.09</td>
<td>4.56</td>
<td>6.61</td>
<td>0.00</td>
</tr>
<tr>
<td>%</td>
<td>4.48</td>
<td>3.09</td>
<td>4.56</td>
<td>6.61</td>
<td>0.00</td>
<td>18.74</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other #</td>
<td>16</td>
<td>12</td>
<td>87</td>
<td>95</td>
<td>1</td>
<td>211</td>
<td>%</td>
<td>1.18</td>
<td>0.88</td>
<td>6.39</td>
<td>6.98</td>
<td>0.07</td>
</tr>
<tr>
<td>%</td>
<td>1.18</td>
<td>0.88</td>
<td>6.39</td>
<td>6.98</td>
<td>0.07</td>
<td>15.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refusal #</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td>12</td>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.22</td>
<td>0.07</td>
<td>0.59</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
<td>0.22</td>
<td>0.07</td>
<td>0.59</td>
<td>0.88</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No respondent</td>
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<td>2</td>
<td>4</td>
<td>13</td>
<td>0</td>
<td>19</td>
<td>%</td>
<td>0.00</td>
<td>0.15</td>
<td>0.29</td>
<td>0.96</td>
<td>0.00</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.15</td>
<td>0.29</td>
<td>0.96</td>
<td>0.00</td>
<td>1.40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total #</td>
<td>363</td>
<td>225</td>
<td>504</td>
<td>253</td>
<td>16</td>
<td>1361</td>
<td>%</td>
<td>26.67</td>
<td>16.53</td>
<td>37.03</td>
<td>18.59</td>
<td>1.18</td>
</tr>
<tr>
<td>%</td>
<td>26.67</td>
<td>16.53</td>
<td>37.03</td>
<td>18.59</td>
<td>1.18</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table D-5. 1983 JES Respondent Versus SSN Response Type For Individually Operated Tracts, Virginia

<table>
<thead>
<tr>
<th>JES Respondent</th>
<th>SSN Response Type</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Non-New Verified</td>
<td></td>
</tr>
<tr>
<td>Operator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>237</td>
<td>240</td>
</tr>
<tr>
<td>%</td>
<td>24.87</td>
<td>25.18</td>
</tr>
<tr>
<td>Spouse</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>32</td>
<td>40</td>
</tr>
<tr>
<td>%</td>
<td>3.36</td>
<td>4.20</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>%</td>
<td>0.94</td>
<td>1.15</td>
</tr>
<tr>
<td>Refusal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>No Respondent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>278</td>
<td>291</td>
</tr>
<tr>
<td>%</td>
<td>29.17</td>
<td>30.54</td>
</tr>
</tbody>
</table>

Note: All percentages are rounded to two decimal places.
### APPENDIX E

Table E-1. 1983 DES Respondent Versus SSN Response Type For Individually Operated Tracts, North Dakota

<table>
<thead>
<tr>
<th>SSN Response Type</th>
<th>DES</th>
<th>New</th>
<th>Verified</th>
<th>Verified</th>
<th>Inaccessible</th>
<th>Refusal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
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Table E-2. 1983 DES Respondent Versus SSN Response Type For Individually Operated Tracts, Ohio

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### APPENDIX E

Table E-5. 1983 DES Respondent Versus SSN Response Type For Individually Operated Tracts, Virginia

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**Total** | 383 |
**%**     | 100.00 |
### Table F-1. 1984 JES Respondent Versus SSN Response Type For Individually Operated Tracts, North Dakota

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### Table F-2. 1984 JES Respondent Versus SSN Response Type For Individually Operated Tracts, Ohio

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<td>6.08</td>
<td>2.19</td>
<td>100.00</td>
</tr>
</tbody>
</table>
## APPENDIX F

### Table F-3. 1984 JES Respondent Versus SSN Response Type For Individually Operated Tracts, South Dakota

<table>
<thead>
<tr>
<th>SSN Response Type</th>
<th>DES :New</th>
<th>Respondent :SSN</th>
<th>Verified</th>
<th>Verified : Inaccessible</th>
<th>Non- Verified</th>
<th>Refusal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator #</td>
<td>179</td>
<td>257</td>
<td>7</td>
<td>148</td>
<td>22</td>
<td>613</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>19.87</td>
<td>28.52</td>
<td>0.78</td>
<td>16.43</td>
<td>2.44</td>
<td>68.04</td>
<td></td>
</tr>
<tr>
<td>Spouse #</td>
<td>13</td>
<td>25</td>
<td>7</td>
<td>18</td>
<td>1</td>
<td>64</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>1.44</td>
<td>2.77</td>
<td>0.78</td>
<td>2.00</td>
<td>0.11</td>
<td>7.10</td>
<td></td>
</tr>
<tr>
<td>Other #</td>
<td>2</td>
<td>10</td>
<td>16</td>
<td>55</td>
<td>0</td>
<td>83</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>0.22</td>
<td>1.11</td>
<td>1.78</td>
<td>6.10</td>
<td>0.00</td>
<td>9.21</td>
<td></td>
</tr>
<tr>
<td>Refusal #</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>8</td>
<td>76</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>0.33</td>
<td>0.22</td>
<td>0.11</td>
<td>0.89</td>
<td>8.44</td>
<td>9.99</td>
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</tr>
<tr>
<td>No Respondent #</td>
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<td>7</td>
<td>40</td>
<td>3</td>
<td>51</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.11</td>
<td>0.78</td>
<td>4.44</td>
<td>0.33</td>
<td>5.66</td>
<td></td>
</tr>
<tr>
<td>Total #</td>
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<td>295</td>
<td>38</td>
<td>269</td>
<td>102</td>
<td>901</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>21.86</td>
<td>32.74</td>
<td>4.22</td>
<td>29.86</td>
<td>11.32</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

### Table F-4. JES Respondent Versus SSN Response Type For Individually Operated Tracts, Tennessee

<table>
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<tr>
<th>SSN Response Type</th>
<th>DES :New</th>
<th>Respondent :SSN</th>
<th>Verified</th>
<th>Verified : Inaccessible</th>
<th>Non- Verified</th>
<th>Refusal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operator #</td>
<td>284</td>
<td>248</td>
<td>379</td>
<td>84</td>
<td>8</td>
<td>1003</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>21.13</td>
<td>18.45</td>
<td>28.20</td>
<td>6.25</td>
<td>0.60</td>
<td>74.63</td>
<td></td>
</tr>
<tr>
<td>Spouse #</td>
<td>23</td>
<td>34</td>
<td>64</td>
<td>47</td>
<td>1</td>
<td>169</td>
<td></td>
</tr>
<tr>
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<td>1.71</td>
<td>2.53</td>
<td>4.76</td>
<td>3.50</td>
<td>0.07</td>
<td>12.57</td>
<td></td>
</tr>
<tr>
<td>Other #</td>
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<td>19</td>
<td>54</td>
<td>59</td>
<td>0</td>
<td>138</td>
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</tr>
<tr>
<td>%</td>
<td>0.45</td>
<td>1.41</td>
<td>4.02</td>
<td>4.39</td>
<td>0.00</td>
<td>10.27</td>
<td></td>
</tr>
<tr>
<td>Refusal #</td>
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<td>0</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>%</td>
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<td>0.00</td>
<td>0.37</td>
<td>0.15</td>
<td>0.52</td>
<td>1.04</td>
<td></td>
</tr>
<tr>
<td>No Respondent #</td>
<td>0</td>
<td>0</td>
<td>7</td>
<td>13</td>
<td>0</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>0.00</td>
<td>0.100</td>
<td>0.52</td>
<td>0.97</td>
<td>0.00</td>
<td>1.49</td>
<td></td>
</tr>
<tr>
<td>Total #</td>
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<td>301</td>
<td>509</td>
<td>205</td>
<td>16</td>
<td>1344</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>23.29</td>
<td>22.40</td>
<td>37.87</td>
<td>15.25</td>
<td>1.19</td>
<td>100.00</td>
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</tr>
</tbody>
</table>
### Table F-5. 1984 JES Respondent Versus SSN Response Type For Individually Operated Tracts, Virginia

<table>
<thead>
<tr>
<th>SSN Response Type</th>
<th>Operator</th>
<th>Spouse</th>
<th>Other</th>
<th>Refusal</th>
<th>No Respondent</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>DES</td>
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<td>26</td>
<td>9</td>
<td>0</td>
<td>0</td>
<td>250</td>
</tr>
<tr>
<td>New</td>
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<td>50</td>
<td>7</td>
<td>0</td>
<td>0</td>
<td>301</td>
</tr>
<tr>
<td>Verified</td>
<td>35</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>53</td>
</tr>
<tr>
<td>Verified</td>
<td>35</td>
<td>37</td>
<td>18</td>
<td>0</td>
<td>15</td>
<td>263</td>
</tr>
<tr>
<td>Inaccessible</td>
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<td>1</td>
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<td>22</td>
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<td>210</td>
<td>5</td>
<td>17</td>
<td>889</td>
</tr>
</tbody>
</table>

- Operator: SSN 244, % 24.18
- Spouse: SSN 50, % 2.92
- Other: SSN 18, % 1.01
- Refusal: SSN 5, % 0.00
- No Respondent: SSN 2, % 0.00
- Total: SSN 889, % 100.00