United States Department of Agriculture

Statistical Reporting Service

SRS Staff Report November 1984

# Collection and Use of Social Security Numbers in the Area Frame

Dwaine Nelson Loren Nordhausen Henry Power COLLECTION AND USE OF SOCIAL SECURITY NUMBERS IN THE AREA FRAME. By Dwaine Nelson, Loren Nordhausen, and Henry Power; Statistical Reporting Service; Estimates Division; U.S. Department of Agriculture; Washington, D. C. 20250; November, 1984. SRS Staff Report.

#### 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 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 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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### ACKNOWLEDGEMENTS:

The authors thank Fred Vogel who reviewed the report and Carolyn Shetterly who typed the report. We also appreciate the cooperation from the five State Statistical Offices which participated in the study.

Washington, D.C.

November 1984

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### SUMMARY

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 procedures as outlined overlap review in However, definite additional overlap instructions. 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. listing MMS with the other 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 Poverlap 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: 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 determinations than use of only overlap conventional 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 on questionnaires did not significantly 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 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 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 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.

1982 STUDY --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 1. Numbers of ASCS Names Supplied And SSN'S Added, South Dakota And Virginia, 1982

\$\$0	:	No. of Names to SSO				SSN'S :Total No. of List t Frame: Frame Records
South Dako Virginia	ta	6,155 7,361		1,886 * 3,000	87,537 85,093	

\* 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 8-1, 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 8-2, 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

: : : : : : :		Area Records with SSN's Or EIN's	: with SSN's : or EIN's	: Area Records Matching List Frame	: Percent of Area : Records With : SSN/EIN Matching : List Frame
	(A)	(8)	(C) = (B)/(A)	(D)	(E) = (D)/(B)
South Dakota Virginia	1,057 1,082	297 509	28.1 47.0	238 <u>1/</u> 259 <u>2</u> /	80.1 50.9

 $<sup>\</sup>frac{1}{2}$ / All were matches on SSN 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:

SSO Original Overlap Deter- mination	Number Of Matches Count	Findings Based Upon SSN Match
Coded NOL	13	Found as NOL
n	0	Found as OL
16	14	Found as inactive record or record in a different class (i.e., NOL)
Coded OL	0	Found as NOL
и	193	Found same record that SSO determined as OL
u	9	Found a drop record cross-referenced to same record that SSO determined as OL
u	5	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)
и	4	Found a drop record not cross-referenced to another record

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:

New SSN Not Asked Verified SSN Refused Did not know Inaccessible

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.

1983 STUDY --NORTH DAKOTA, OHIO, SOUTH DAKOTA, TENNESSEE, AND VIRGINIA 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 3. Summary of 1983 June Enumerative Survey Record Counts and Results of SSN/EIN Match with List Frame Records -- North Dakota, Ohio, South Dakota, Tennessee, and Virginia

<u> </u>		SIAI	<u> </u>		
Category : N	Dak :	Ohio :	S Dak :	Tenn :	٧a
Total JES Ag Tracts	1,268	1,218	1,068	1,525	1,092
Total JES Ag Tract N&A Records 1/	1,832	1,715	1,500	1,824	1,41
N&A Records With No SSN/EIN % of N&A Records	1,123 61	958 56	999 67	532 29	1,130 80
N&A Records With SSN/EIN % Of N&A Records	709 39	757 44	501 33	1,292 71	27 <u>2</u> / 2
N&A Records With SSN/EIN Not Matching List Records % of N&A Records With SSN/EIN	164 23	443 59	102 20	688 53	14 5
N&A Records Matching List Records And Previously Determined To Be Overlap % of N&A Records with SSN/EIN	470 66	215 28	287 58	529 41	6 2
N&A Records Matching List Records And Previously Determined to be Overlap With Different List Records % of N&A Records with SSN/EIN	28 4	11 1	10 2	33 3	1
N&A Records Matching List Records And Not Previously Determined To Be Overlap % of N&A Records with SSN/EIN	<b>47</b> 7	88 12	102 <i>2</i> 0	42 3	48 17

<sup>1/</sup> 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.

<sup>2/</sup> 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.

Table 4. June Enumerative Survey Refusal Rate for Agricultural Tracts -- North Dakota, Ohio, South Dakota, Tennessee and Virginia

	:			YEAR		
State	: :_	1983	:	1982	:	1981
N Dak	# %	56 4.43		<u>1</u> / 61 4.84		73 5.82
Ohio	# %	68 5.58		76 6.57		65 5.41
S Dak	# %	124 11.74		138 13.21		215 19.96
Tenn 🗀	# %	13 0.85		15 · 0.99		23 1.57
Va .	# %	6 0.55		<u>1</u> / 11 1.02		9 0.88

<sup>1/</sup> South Dakota and Virginia started collecting SSN/EIN information during the 1982 JES. Other States started during the 1983 JES.

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

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

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.

## 1984 CONTINUING STUDY

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 Although some SSN refusals continue, it is interesting to note that the overall refusals rates on SSN in most States is lower for 1984 than for 1983. 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

:	: STATE							
Category	N Dak	: Ohio	S Dak	: Tenn :	Va			
Total JES Ag Tracts	1,273	1,198	1,124	1,532	1,027			
Total JES Ag Tract N&A Records 1/	1,387	1,712	1,647	1,884	972			
N&A Records With No SSN/EIN % of N&A Records	745 54	729 43	960 58	569 30	495 51			
N&A Records With SSN/EIN % Of N&A Records	642 4 <b>6</b>	983 57	687 42	1,315 70	477 49			
N&A Records With SSN/EIN Not Match List Records % of N&A Records With SSN/EIN	ing 110 17	484 49	173 25	72 <b>3</b> 55	272 57			
N&A Records Matching List Records A Previously Determined To Be Overlap % of N&A Records with SSN/EIN		300 31	387 57	505 38	159 33			
N&A Records Matching List Record And Previously Determined to be Overlap With Different List Records % of N&A Records with SSN/EIN		2 <b>4</b> ·2	16 2	26 2	14 3			
N&A Records Matching List Records And Not Previously Determined To Be Overlap % of N&A Records with SSN/EIN	52 8	175 18	111 16	61 5	<b>32</b>			

<sup>1/</sup> 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

Survey	: : N	: Dak :	0h i	io	: : S Da	k	Ter	: nn :	٧	a
Period	: No	: Pct. :			: No.	: Pct.	No .	Pct.:	No.	: Pct.
81 JES	73	5.82	65	5.41	215	19.96	23	1.57	9	0.88
82 JES <u>1</u> /	61	4.84	76	6.57	138	13.21	15	0.99	11	0.99
83 JES <u>2</u> /	56	4.43	68	5.58	124	11.74	13	0.85	6	0.55
84 JES	69	5.43	69	5.76	109	9.82	16	1.04	6	0.58
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

South Dakota and Virginia started collecting SSN/EIN information during the 1982 JES.

<sup>2/</sup> Ohio, North Dakota and Tennessee started collecting SSN/EIN information during the 1983 JES.

REFERENCES

[1] Young, Robert W. The Feasibility of Obtaining the Social Security Number from Farm Operators and its Use in Identifying the "Overlap" Domain in Multiple Frame Sampling. Research Report, U.S. Department of Agriculture, Statistical Reporting Service, April, 1971.



# JUNE 1982 ACREAGE & LIVESTOCK Enumerative Survey

Form Approved Q.M.S. Number 526-8088

CL 12-00394

District

Non-MF, Eastern AL, AR, FL, KY, LA, MD-DI MI, MS, NY, N. Eng., NJ, PA SC, TN, VA, WV

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### SECTION 8 - PARTNERSHIP OR JOINT OPERATION

Refer to face page to check box. \_ = = Is operation partnership or joint?

		☐ YES · Continue.		□ NO · Go to Section D.					
En	riler you indicated	d this operation was a	partnersi	hip or joint am	angement.		Total	artners	
	Do'all partners si	hare equally in day-to-da	y decision	s?			821	ar uners	
	TI YES . Carel	ier the oldest as the open	-4				(Including	operator)	
	□ NO · The pa	riner that makes most of	the day-t	o-day decisions	is the operato	<b>v</b> .			
		itor shown on face page t ons or the oldest. Make c			ost dey-to-da	<b>y</b>			
2	or joint land oper	to (verify/identify) the crating arrangement. rd-Tenant, cash rent or si	•	•	tnership				
	Name								
		(Lest)		(First)		(Middle)			
	Address								
	<del></del>			(Route or Street	Ų		<del>-</del>		
				-		<b>a:</b> 6.4:			
		(City)		(State)	CATTLE	(Zip Code) HOQS	POTATOES	RICE	
İ	Phone Number	`	_ 2		106	123	245	966	
$\bot$		(Aree Code)	18.S.N.				<u> </u>		
			5.3.n.	<u>-</u> -		لعا			
Γ	Name					<del></del>	•		
		(Lest)	<del></del>	(First)		(Middle)			
	Address	• •							
				(Route or Street	<i>y</i>			<del></del>	
1									
		(City)		(State)		(Zip Code)		2100	
	Phone Number	( )		<b>10</b>	CATTLE 936	HOQ5	POTATOES	PICE 966	
<u></u>		(Area Code)	<u> </u>	<u> </u>	<u> </u>	<del></del>			
			8.S.N.						
Г	Mana								
	Name	(Lee)		(First)		(Middle)			
١.	Address	(a)		<b>42</b>		(3.3.3.3.7)			
I		<del></del>		(Route or Street	,			_	
1									
1	<del></del>	(City)		(State)		(Zip Code)			
	Phone Number	( )	4	10	CATTLE SO?	HOGS	POTATOES	RICE 967	
i		(Aree Code)			1	1			

2.

5	Crop Reparsing Board
Statistic Service	al Reporting

## DECEMBER 1982 ACREAGE & Livestock Enumerative Survey

Form Approved O.M.S. Number 535-0000 C.E. 19-0037 F

U.S. Department of Agriculture

State	District	Segment	Tract	Sub-Tract
		99000		

ANNUAL MF—HOQ Ky., S.D., Wise.

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	Trac		Cattle	Hogs	Chistons	Optional	٦
Number:	Lett		□ NOL	□ NOF	□ NOF	407 406	٦
County:			3 EO	□ OL	D 80		1
I need to make sure that we have your  Name of Farm, Ranch or Operation:		OPEI	s comple	ete and o	OFFECT.  JERSHIP NAM  TLE HOO  023		
Operator:	L						
(Lest) (First) (Mic Address:(Rouse or Street)	ddle) 						
(City) (State) (Zip)							
Phone Number: ( ) —							_
			OPI	ERATOR I			4
				CAT	TLE HOG	8 CHICKENS	┨
		<u>.</u>			<u></u>		J
	Jointly dividually d	<u> </u>	•	d ••• EDCTER			7
	eneged Lan			Stat (Sta		البيرة المدرات بالمراجع	J
(For South Dakota Only. Other States  2a. To assist in identifying duplication (record/verify) your (and/or any If your operation has an employed your social security number is void Title 7, Section 2204, of the L	on with our partners) <b>8</b> or ID (EID), duntary and	r Lists of Farm operate SOCIAL SECURITY N , this would also be bei	UMBER pful. Di	rciosure	V). Of	·	
Verifi Did s	SSN () ied SSN () ied know	D-2 Refused	04 0-5 0-6	BITER	CODE 012		]
In June the operator lived:							
□ Inside □ - Oreside (	of this tract	<b>.</b>					
	MSIDE	ี □ −ฦ					
INSIDE or OUTSIDE the tract?	OUTSIDE	□ <b>-•</b> }······		ER CODE	81-	٩	

## SECTION A — PARTNERSHIP OR JOINT OPERATION Refer to face page to check box.

ls operati	ion partnerskij	of joins.			
YES · Continue.	Ε	NO - Go to Section	B. ———		<b>→</b>
Earlier you indicated this operation was a partner	irship or join!	arrangement		Total	Partners
Do all partners share equally in day-to-day	decisions?			921	Parmers
YES - Consider the oldest as the oper	elor.			(Inched)	ing operator)
NO - The partner that makes most of	the day-to -de	y decisions is the opera	tor.		
Operator shown on face page is decisions or the oldest. Make a			ey .		
<ol> <li>Now I would like to (verify/identify) the other point land operating arrangement.         fexclude Landlord-Tenant, cash rent or share cro     </li> </ol>	person(s) in thi op errangemen	s partnership or			
Name (Last, First Middle)	P				
Address (Rouse or Street)	•				
(City — Siere — Zip Code)					
Number (Aree Code)	140		CATTLE	HOGS	CHICKENS
	2		836	825	845
8.8.N			L	<b></b>	L
Name (Last, First Middle)	,				
Address (Route or Street)					
(City - State - Zip Code)					
Phone ( ) — Number			<del></del>	1	(2002
(Area Code)	3		CATTLE 836	HOGS 826	CHICKENS
8.8.N					
Name	•				
(Lett, First Middle) Address	,				
(Route or Street)					
(City — State — Zip Code)					
Phone ( ) —					
(Area Cade)			CATTLE 657	H0Q8	CHICKENS M7
8.8.N	ri -				

### SECTION N - RESPONDENT CODE

Check and	enter Respondent Code below.		
-	Chec	k Code	
	Operator 1 Spouse 2 Other (Specify   3 Observed Data Only - Refusal 4 Observed Data Only - No Respondent 5	Enter Cod	<b>0</b> 10
Enter name	of respondent if not the operator or spouse.		
CONCLUE	DE INTERVIEW		
Enumerato	rDate		
			OFFICE USE
			<b>006</b>
			100

Crop Reporting Board

# JUNE 1983 ACREAGE & LIVESTOCK Enumerative Survey

Form Approved C.M.S. Number 0535-0000 C.E. 13-0029N

U.S. Department of Agriculture

State	District	Segment	freet	ı ,		Optional	
	000.00	00000			407	406	
egment	Number:	Trac	t Letter:	Count	Y:		
				ARTNERSHIP NAME			
i	LBF ID	İ	ELD.		Cattle	Hegs	Rice
0					833	823	963
Name Farm, er Operation Operation Address	Ranch	(First) (Route or Street	(Middle)		Operator	r Name Sticke	a a
	(Aree Code)		OPERAT	OR NAME			
	LBF ID		BAN.		Cattle	Hegs	Rico
•			_	_	994	924	964
Is the of	peration named ab	ove: 🛛 A	ndividually operat artnership or join lanaged Land		Enter	Code 045	
Does the	t operator of this t	tract live INSII	DE or OUTSIDE	the segment?			
	SIDE - Enter 5	in Code Box e	and continue.	7		81_	1
				I	• • • • • • • • • • • •		<del></del> -
D 00	UTSIDE · Enter 6 't any other person			operate a farm or ran	ch?		
Ol		u living in this		operate a farm or ran	ch?		
O Ol Are ther	e any other person	as living in this  VES (Assign	household who de Enter Name	operate a farm or ran	·	pove?	

#### 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.

Total Partners

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

(Including operator)

☐ YES - Consider the oldest as the operator.

 $\square$  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 (f necessary.)

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.)

718/7	MO						
		(Lest)	(First)		(Midd	le)	
Add	ress				-		
			(Route or Street	H)			
	(City)	(Siete)	Phor		)		
			(Zip Code)	(///	Code)	T	<del></del>
2	LIF ID	1	B.B.M.		CATTLE	HOGS 825	956 1
						·	
Nom	no	(Last)	(First)		(Middl		
			1		<b>Variation</b>		
Addı	ress		Paule of Street				
Add	ress		(Rouse or Street	•			
Add			Phon	· •{	)		
Add	(City)	(State)	(Zip Code)	· •{	Codej		
Addi		(State)	Phon	· •{	CATTLE	HOGS	Risc
Addi	(City)	(State)	(Zip Code)	· •{	Codej		Nic Bio
Add	(City)	(State)	(Zip Code)	· •{	CATTLE	HOGS	
	(Clay)	(State)	(Zip Code)	· •{	CATTLE	HOGS	
	(City)	(State)	(Zip Code)	· •{	CATTLE	HOGS 828	
a Nam	(Clay)	(Siete)	(Zip Code)	· •{	CATTLE 536	HOGS 828	
a Nam	(Clay)	(Siete)	(Zip Code)	(Area	CATTLE 536	HOGS 828	
a Nam	(Clay)	(Siete)	(Zip Code)  B.S.N.  (First)  (Rouse or Street	(Area	Codej CATTLE COS (Middle	HOGS S38	
a Nam	(Clay)	(Siete)	(Zip Code)  B.S.N.  (First)  (Rouse or Street	(Area	Codej CATTLE COS (Middle	HOGS S38	

## 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 co	Decision of the second of the	3 \	r Code 012
	SECTION 0 - RESPO	ONDENT CODE	
Check and enter resp	ondent code below.		
		Check Code	
Respondent Code:	Operator/Manager	D 1 D 2 D 3 D 4 D 5	er Code
	Observed Data Only - No Respondent		
Enter name of respon	ndeni if not the operator or spouse.		
CONCLUDE INTER	I <i>VIEW</i>	,	
Enumerator		Date	
NOTES:			Office Use
			000
		,	100



# DECEMBER 1983 Acreage & Livestock ENUMERATIVE SURVEY

Form Approved
O.M.S. Number 0525-0000
Expiration Date 5-31-96
C.E. 12-00373
A.-16
AL, FL, NY, PA, TN

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.

	State States	Segment Treet	Sub-Treet	467	Hiena!	
Segment	Number:	Tract Letter:	County	·		
		OPERATION OR P	ARTNERSHIP NAM	E		
	LSF ID	ELD.	CATI		CHICKENS	SHEEP
0				823	943	<u> </u>
I. I need to (the open complete complete)  Name of Farm, I or Open complete	Rench ration:  of Clast) (First)  (Route or Street)  (City) (State)	•		Name	tion or Partner Sticker Sticker	ship
П	LET ID	OPERAT B.E.M.	OR NAME	LE HOGS	CHICKENS	SHEEP
1			, 504	884	944	- SANEEP
لا		<u> </u>			1	
in june, th	is tract was: U - Indivi		Jointly operated	Mei - البا	neged land	
2. How is t	this tract operated now?	Individually operated - Partnership or joint - Managed land -	<b>⅓</b> }	BRITER CO	DOE 644	
In June the	operator lived: 🔲 - In	uside 🔲 - Outside	. of this tract.			
3. Does the	operator now live	□ MSIDE · 5 ]				
MSIDE	or OUTSIDE the tract?	_ \		EINTER CO	xxx 81	•
		OUTSIDE .			Limm	

8.S.N.

## SECTION A — PARTNERSHIP OR JOINT OPERATION Refer to face page to check box.

Is operation partnership or joint. NO . Go to Section B. -YES - Continue. Earlier you indicated this operation was a partnership or joint arrangement. Total Partners 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. 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.) Middle) First (Route or Street) (City - State - Zip Code) Phone ( Number (Area Code) CATTLE HOGS CHICKENS SHEEP 2 8.5.N. \_\_\_\_\_ (Lest, Middle) First Address (Route or Street) (City - State - Zip Code) Number HOGS CHICKENS SHEEP (Area Code) 147 10 CATTLE 3 8.S.N. \_\_\_\_\_ (Last. Middle Fire Address . (Route or Street) (City - State - Zip Code) (Area Code) CATTLE HOGS CHICKENS SHEEP

#### SECTION O - S.S.N.

(TENNESSEE ONLY)	<del>-</del>
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
	e of your social security number is voluntary and is collected
under the General Authority of Title 7, Se	ction 2204, of the U.S. Code.
·	

Refer to Face Page/page	2 to (	record/verify) EID/SSN (S).		
(Check and enter code):		New SSN#         1           Verified SSN#         2           Non-Verified SSN#         3           Inaccessible         4           Refused         5	Enter Code	012

Crop Reporting Board Statistical Reporting Service

# JUNE 1984 ACREAGE & LIVESTOCK Enumerative Survey

Form Approved
O.M.B. Number 0535-0000

C.E. 12-0029M

U.S. Department of Agriculture	Enumera	live Survey .	Tennessee
State District	Segment Treet	467	Optional 406
Segment Number:	Tract Letter:	County:	
F	OPI	ERATION OR PARTNERSHIP NAM	
		ELM.	923
		Operation or Partnership N	ame — Sticker Verified
Name of Farm, Ranch or Operation:	is complete and correct.		
Operator:(First)	(Middle) (Last)	Operator Name	— Sticker Verified 🗆
Address:(R.	oute or Street)		
(City) Phone No. ( ) (Area Code)	(Siase) (Zip)		
	(Ler in	OPERATOR NAME	
	1	8A.N.	
. Is the operation named above	□ Individually operate □ Partnership or join □ Managed Lond		ler Code
Does the operator of this tra	ct live INSIDE or OUTSIDE	the segment?	•
INSIDE . Enter 5 in	Code Box and continue.	1	
	Code Box and go to Page 2. living in this bousehold who a		[81
□ NO · Continue.	1 YES - Exier Name_ (Assign tract on Part ID		
Do you operate land under a		ement other than the one listed	l sbove?
□ NO - Continue.		tract letter for other erronnen	

### SECTION B - PARTNERSHIP OR JOINT OPERATION

### Refer to face page to check box.

			Is oper	retion pert	inership or joint l	land operating at	rangement?	
		í	D YES-C	ontinue.		D NO.	Go to Section D.	
Eac	rlier you ind	dicated th	is operatio	on was a	partnership or j	joint arrangeme	mL	
_	D 11		Mar II	4	45.1			Total Partners
1.	Do all par	thers share	equally in	day-to-day	y decisions?			921
	. D YES.	Consider t	he oldest a	s the open	stor.			(Including operator)
	D NO -	The parine	that make	es most of	the day-to-day d	lecisions is the of	perstor.	•
					must be the one a prrections if neces		-to-day	
2.	or joint las	nd operatin	ig arrangen	nent.	other person(s) in N <i>are crop arrange</i>	•		
Г	Partner N	ame — S	ticker Verl	ifled				
	_: - Name							
	<del>-</del>		(Fin	st)	Mi	ddle)	(Lest)	
	Address				<del></del>			· <u> </u>
<b> </b> .					(Route	or Street)		
						_ Phone (	)	
		(City)	Con		(Zip Code)		Code)	
1		İ	Ī	LSF 10		8.S.N.		187
1			1 2			1		896
			*					
	Tearings No		icker Veri	****				925
	Partner No	sme — St	icker Verl	fled				1425
	Partner No	ame — Si				ddol		
	Name	ame — Si	ticker Verl		(Mid	ldie)	(Lest)	125
	J	ame — \$1					(Les)	925
	Name	ame — \$1				or Str <del>uct</del> )	(Len)	
	Name	ame — St		EL)		or Street) _ Phone (	(Lest)	
	Name		(Firs	EL)	(Route	or Street) _ Phone (	)	18.0
	Name		(Firs	st) se)	(Route	or Sireri) _ Phone ( (A res	)	
	Name		(Firs	st) se)	(Route	or Sireri) _ Phone ( (A res	)	10.0
	Name	(City)	(Firs	te)	(Route	or Sireri) _ Phone ( (A res	)	10.0
	Name	(City)	(State)	ze) Laf ID	(Route (Zip Code)	or Street) _ Phone (	Code)	10.0
	Name	(City)	(Firs	ze) Laf ID	(Route	or Street) _ Phone (	)	10.0
	Name	(City)	(State)	ze) Laf ID	(Route (Zip Code) ,	or Street) _ Phone (	Code)	10.0
	Address .  Partner Na	(City)	(State)	ze) Laf ID	(Route (Zip Code) ,	or Street) _ Phone (	Code)	INP
	Name	(City)	(State)	ze) Laf ID	(Route (Zip Code) ,	or Street) _ Phone ( _(A ree	Code)	18.0

#### SECTION O - 8.S.N.

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 (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.

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     Enter Code	912
> SECTION Q — RESPONDENT CODE	
Check and enter respondent code below.	
Check Code	
Respondent Code:  Operator/Manager	010
Observed Data Only · No Respondent	
CONCLUDE INTERVIEW	
Enumerator Date	
NOTES:	Office Use
	OME .
	100

### APPENDIX B

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

Sample :	Sample	: Mail-	: Tabu	ated	:Not Tab	ulated	: Total		
Description :	Size	: out	: No. :	%1/	: No. :	%1/	:No. :	<u>%1</u> /	
		:	<u>: :</u>		: :		: :		
Social Security #	8,250	8,220	2,149	26.1	1,180	14.3	3,329	40.5	
No Social Security	# 8,250	8,211	2,103	25.6	1,289	15.7	3,392	41.3	
Total	16,500	16,431	4,252	25.9	2,469	15.0	6,721	40.9	

<sup>1/</sup> Percent of mailout

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

	:	Mail-	:	Total	:	Soc. Se Report		:	Soc. Sec. # Blank		
Group	: :	out	:	Response	_:	No. :	% <u>1</u> /	:	No. :	% <u>1</u> /	
Social Security		8,211		2,149		1,608	74.8		541	25.2	

<sup>1/</sup> Percent of total response.

## APPENDIX B

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

		Tracts	:	Reported	:	Percent of Tracts	:	Didn't Kno		<del></del>	
	:	Interviewed	:	SSN	:	Reporting SSN	:	SSN	:	Refusal	: Blan
Code	<u>:</u>	No.	<u>:</u>	No.	:	Percent	:	No.	:	No.	: No
1		33		21		64		3		1	8
2		19		6		32		_		ī	12
3		60		21		35		34		-	12 5
4		67		45		67		-		_	22
5		46		29		63		11		_	6
6		50		24		48		-		_	
7	,	· 39		27		69		4		_	26 8
8		22		8		36		<u>-</u>		_	14
· 9		72		33		46		21		1	17
10		61		33		54		25		ī	2
11		31		26		84		-		_	2 5 13
12		29		13		45		3		-	13
13		63		21		33		17		-	25
14		44		20		45		12		1	25 11
15		40		1		3		-		3	36
16		43		1		2		8		ī	33
17		92		25		3 2 27		_		ī	33 66
18		22		6		27		-		-	16
19		1		1		100		-		_	-
20		55		46		84		4		4	1
21		101		31		31		<u>.</u>		i	69
22		4		3		75		-		<u>-</u>	1
23		22		9		41		-		_	13
24		15		8		53		2		-	5
25		43		8		19		34		-	ĺ
otal		1,074		466		43		178		15	415

#### APPENDIX C

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

Category	: South D		: Virgini	a
	: No. Reports	: % of Total	: No. Reports :	% of Total
New SSN's obtained	107	15.8	85	22.8
Verified SSN's	161	23.8	<u>159</u>	<u>42.7</u>
Total Records with SSN	<del>268</del>	39.6	244	65.6
Don't Know SSN	168	24.8	37	9.9
SSN Not Asked	66	9.8	23	6.2
SSN Refused	104	15.4	8	2.2
SSN Inaccessible	70	10.4	60 372	$\begin{array}{c} 16.1 \\ 100.0 \end{array}$
Total Ag Tracts	676	100.0	3/2	100.0
SSN Refusals by Survey				
Response Code:			_	
1 - Operator	17	16.3	6	75.0
2 - Spouse	1 2	1.0	0 0 2 0 8	
3 - Other	2	1.9	0	25.0
4 - Refusal	82	78.9 1.9	2	25.0
5 - Inaccessible	2 104	100.0	<u> </u>	100.0
Total	104	100.0	3	100.0
SSN Inaccessible by Survey				
Response Code	_	10.0	•	<b>5</b> 0
l - Operator	7	10.0	3	5.0 16.7
2 - Spouse	4	5.7	10 38	16.7 63.3
3 - Other	10 6	14.3 8.6	0	03.3
4 - Refusal 5 - Inaccessible	43		9	15.0
5 - Inaccessible	<u>43</u>	61.4		_13.0
Total	70	100.0	60	100.0

#### APPENDIX C

Table C-2. SSN Refusals And Inaccessibles By Operation Type, 1982 December Enumerative Survey, South Dakota and Virginia

Category :_	South Dak	ota	: Virginia	% of Total 1/
•	No. Keports	: % of lotal 1/	: No. Reports :	% OF IOLAT 1/
Refusal - Individual - Partnership - Managed	84 20 0	15.3 16.0	7 1 <u>0</u>	2.2
Total Refusals	104	15.4	8	2.2
Inaccessible - Individual - Partnership - Managed	56 14 <u>0</u>	10.2	52 6 2	16.6 13.3 15.4
Total Inaccessible	70	10.4	60	16.1
Positive SSN Responses by Operation Type:			•	
Individual Partnership Managed	222 45 <u>1</u>	40.5 36.0 33.3	205 33 <u>6</u>	65.3 73.3 <u>46.1</u>
Total	268	39.6	244	65.6
Positive SSN Responses By Preser of Cattle or Hog Data:	nce			•
Zero Hogs Positive Hogs Zero Cattle Positive Cattle	225 43 90 178	39.0 43.4 32.4 44.7	205 39 142 102	63.9 76.5 62.8 69.9

<sup>1/</sup> 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

Category	: South C		Virgini	
	: No. Reports	: % of Total :	No. Reports :	% of Total
\$ 1,000 - \$ 2,499 2,500 - 4,999	8 <b>4</b> 0	16.4	6 0	2.3
5,000 - 9,999 10,000 - 19,999	0 1	3.7	0 1 0	7.7
20,000 - 39,999 40,000 - 99,999	3	9.6 14.3	0	
100,000 - 199,999	8	20.7	0	
200,000 - 499,999 500,000 +	2 0	25.0 ——	0 <del>-</del>	100.0
otal	104	15.4	8	2.2
Inaccessibles on SSN by JES	Sales Index:			
1,000 - \$ 2,499 2,500 - 4,999	61 1	11.9 25.0	47 1	18.0 5.9
5,000 - 9,999 10,000 - 19,999	0 2	6.4	0 2.	28.6
20,000 - 39,999 40,000 - 99,999	0 2 4	3.6	1 0	9.1
100,000 - 199,999 200,000 - 499,999	4 0	13.8	0 0	
500,000 +	0		0	
otal	70	10.4	51	15.5
Positive SSN Responses by JES Sales Index:				
ess than \$999	122	50.0	26	60.5
3 1,000 - \$ 2,499 2,500 - 4,999	188 2	36.7 50.0	166 12	63.6 70.6
5,000 - 9,999 10,000 - 19,999	3 18	<b>50.</b> 0 6 <b>6.</b> 7	11 5	84.6 71.4
20,000 - 39,999 40,000 - 99,999	14 24	<b>45.</b> 2 <b>42.</b> 9	7 14	63.6 100.0
100,000 - 199,999 200,000 - 999,999	14 3	48.3 37.5	2 1	66.7 50.0
500,000 +		100.0		
otal	268	39.6	244	65.6

# APPENDIX D

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

		:	:	S:	N	Response	e Ty	/pe			
		:	$\overline{:}$		۱:	lon-	:		:		
JES		:New	:	Verified	: V	erified	:In	accessil	)-:		
Responder	nt	:SSN	:	SSN	:	SSN	:	ble	:Refu	<u>sal</u>	Total
Operator	# %	517 48.1	4	27 2.51		2 0.19		110 10.24	73 6.	80	729 67.88
Spouse :	# %	47 4.38	3	1 0.09		0 0.00		24 2.23	0	00	72 6.70
Other	# %	17 1.58	3	0 0.00		0 0.00		140 13.04	5 0.	46	162 15.08
Refusal	#%	2 0.1	9	0 0.00		0 0.00		10 0.93	39 3.	63	51 4.75
No Respor dent	า - # %	1	9	0 0.00		0 0.00		57 5.31	2 0.	19	60 5.59
Tota1	# %	584 54.38	3	28 2.60		2 0.19		341 31.75	119 11.	08	1074 100.00

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

		:	:	SSI	Response	Туре		
		:	:	:	Non-	•	: :	
JES		:New	:	Verified:	Verified	:Inaccessi-	: :	
Responder	nt	:SSN	:	SSN :	SSN	: ble	: Refusal:	Total
Operator	# %	576 55.7	0	1	1 0.10	100 9.67	68 6.58	746 72.15
Spouse	# %	61 5.9	0	0 0.00	0 0.00	65 6.29	8 0.77	134 12.96
Other	# %	10 0.9	7	0 0.00	0 0.00	61 5.90	5 0.48	76 7.35
Refusal	# %	1 0.1	0	0 0.00	0 0.00	9 0.87	49 4.74	59 5.71
No Respondent	1 - # %	0 0.0	0	0 0.00	0 0.00	16 1.54	3 0.29	19 1.83
Total	# %	648 62.6	7	1 0.10	10.10	251 24.27	133 12.86	1034 100.00

#### APPENDIX D

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

	:	: SSI	N Response	<b>Туре</b>		
	:	:	Non-	•	:	:
JES	:New	Verified:	Verified	:Inaccessi-	:	:
Respondent	:SSN :	SSN :	SSN	: ble	: Refusal	: Total
Operator #	144	189	2	188	9	532
%	16.49		0.23	21.53	1.03	60.94
Spouse #	9	14	0	44	4	71
%	1.03	1.60	0.00	5.04	0.46	8.13
Other #	2	2	7	85	2	98
%	0.23	0.23	0.80	9.74	0.23	11.23
Refusal #	0	3	2	14	85	104
*	0.00		0.23	1.60	9.74	11.91
No respon-						
dent #	0	0	4	58	6	68
%	0.00	0.00	0.46	6.64	0.69	7.79
Total #	155	208	15	389	106	873
%	17.75		1.72	44.56	12.14	100.00

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

		:	:_	53	SN F	Response	e Ty	pe				
		:	:		:	Non-	:		:		:	
JES		:New	:	Verified	:Ve	erified	:In	accessi	-:		:	
Responden	t	:SSN	:	SSN	:	SSN	:	ble	•	Refusal	: Tota	<u>11</u>
Operator	#	286		169		348		54		7	864	
.,	%	21.	01	12.42		25.57		3.97		0.51	63.	, 48
Spouse	#	61		42		62		90		0	255	
•	%	4.	48	3.09		4.56		6.61		0.00	18.	.74
Other	#	16		12		87		95		1	211	
	%	1.	18	0.88		6.39		6.98		0.07	15.	50
Refusa1	#	0		0		3		1		8	12	
	%	0.	00	0.00		0.22		0.07		0.59	0.	.88
No respon	-										• •	
dent	#	0		2		4		13		0	19	
	%	Ō.	00	0.15		0.29		0.96		0.00	1.	40
Total	#	363		225		504		253		16	1361	
	%	26.	67	16.53		37.03		18.59		1.18	100.	00

# APPENDIX D

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

		:	<u>:</u>	SSN	N Response	Туре		
JES Responder	nt	:New :SSN	:	Verified SSN	: Non- :Verified : SSN	: :Inaccessi : ble	: -: : Refusal:	Total
Operator		237 24.	<del></del> 87	240 25.18	20 2.10	80 8.39	28 2.94	605 63.48
Spouse	# %	32 3.	36	40 4.20	5 0.52	43 4.51	1 0.10	121 12.70
Other	# %	9 0.	94	11 1.15	7 0.73	165 17.31	1 0.10	193 20.25
Refusal	# %	0 0.	00	0 0.00	0.00	1 0.10	5 0.52	6 0.63
No Respondent	า – # %	0	00	0 0.00	1 0.10	27 2.83	0 0.00	28 2.94
Total	# %	278 29.	17	291 30.54	33 3.46	316 33.16	35 3.67	953 100.00

#### APPENDIX E

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

		:	:	SS	N R	esponse	Туре	<u> </u>		•	<del></del>
DES Responde	nt	: :New :SSN	: : Ve	erified SSN	: : V :	Non- erified SSN	: :Ina :	accessi ble	: -:	: Refusal:	Total
Operator	# %	83 13.97	,	247 41.58		15 2.53		26 4.38		14 2.36	385 64.82
Spouse	# %	8 1.35	i	40 6.73		3 0.51		13 2.19		0 0.00	64 10.77
Other	# %	3 0.51		26 4.38		18 3.03		27 4.55		0 0.00	74 12.46
Refusal	# %	0 0.00	)	1 0.17		2 0.34		6 1.01		31 5.22	40 6.73
No Respondent	n – # %	1 0.17	,	1 0.17		5 0.84		24 4.04		0 0.00	31 5.22
Total	# %	95 15.99	)	315 53.03		43 7.24		96 16.16		45 7.58	<b>594</b> 100.00

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

	•	<u>:</u>	<u>:</u>	SSN	Response	Туре		
٥٥٥			:		Non-		:	
DES Responder	nt	:New :SSN	: :	Verified: SSN :	Verified SSN	:Inaccessi-: : ble :		Total
Operator	# %	119 16.	83	312 44.13	2 0.28	20 2.83	288 3 <b>.96</b>	481 68.03
Spouse	# %	17 2.	40	55 7.78	5 0.71	23 3.25	1 0.14	101 14.29
Other	# %	4 0.	57	13 1.84	6 0.85	25 3.54	10.14	49 6.93
Refusal	# %	3 0.	42	1 0.14	1 0.14	5 0.71	39 5.52	49 6.93
No Respor								
dent	# %	0 0.	00	0 0.00	1 0.14	25 3.54	1 0.14	27 3.82
Total	# %	143 20.	23	381 53.89	15 2.12	98 13.86	70 9.90	707 100.00

## APPENDIX E

Table E-3. 1983 DES Respondent Versus SSN Response Type For Individually Operated Tracts, South Dakota

		:	:	SSN	Response	Туре	·	
		:	:		: Non-	:	: :	
DES		:New	:	Verified	:Verified	:Inaccessi-	·: :	
Responde	nt	:SSN	:	SSN	: SSN	: ble	: Refusal:	Total
Operator	#	53		159	56	119	. 4	391
	%	8.3	2	24.96	8.79	18.68	0.63	61.38
Spouse	#	4		12	4	35	0	55
,	%	0.6	3	1.88	0.63	5.49	0.00	8.63
Other	#	2		11	13	36	1	63
	%	0.3	1	1.73	2.04	5.65	0.16	9.89
Refusa1	#	0		1	3	26	46	76
	%	0.0	0	0.16	0.47	4.08	7.22	11.93
No Respon	n-							
dent	#	0		1	11	38	2	52
- • · · ·	%	0.0	0	0.16	1.73	5.97	0.31	8.17
Total	#	59		184	87	254	53	637
	%	9.2	6	28.89	13.66	39.87	8.32	100.00

Table E-4. 1983 DES Respondent Versus SSN Response Type For Individually Operated Tracts, Tennessee

		:	:	SSN	Response	Туре		
		:	:		Non-	:		:
DES		:New	:	Verified:	Verified	:Inaccessi-:	•	:
Responde	nt	:SSN	:	SSN :	SSN	: ble :	Refusal	: Total
Operator	#	36		136	200	20	2	394
о <b>ро</b> : што:	%	5.	95	22.48	33.06	3.31	0.33	65.12
Spouse	#	4		22	47	27	0	100
•	%	0.	66	3.64	7.77	4.46	0.00	16.53
Other -	#	1		8	53	27	0 .	89
	%	0.	17	1.32	8.76	4.46	0.00	14.71
Refusal	#	. 0		0	1	2	2	5
	%	0.	00	0.00	0.17	0.33	0.33	0.83
No Respon	n-						•	
dent	#	0		2	7	7	1	17
	%	0.	00	0.33	1.16	1.16	0.17	2.81
Total	#	41		168	308	83	5	605
	%	6.	78	27.76	50.91	13.72	0.83	100.00

APPENDIX E

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

	:	:_	SSN	Response	Туре		
	:	:-	•	Non-	:		:
DES	:New	:	Verified:	Verified	:Inaccessi-:		:
Respondent	:SSN	:	SSN :	SSN	: ble :		: Total
Operator #	31		181	11	15	9	247
%	8.	09	47.26	2.87	3.92	2.35	64.49
Spouse #	8		33	3	9	0	53
*	2.	09	8.62	0.78	2.35	0.00	13.84
Other #	1		5	7	44	1	58
%	0.	26	1.31	1.83	11.49	0.26	15.14
Refusal #	0		0	0	0	2	2
%	0.	00	0.00	0.00	0.00	0.52	0.52
No Respon-							
dent #	0		0	4	19	0	23
%	0.	00	0.00	1.04	4.96	0.00	6.01
Total #	40		219	25	87	12	383
%	10.	44	57.18	6.53	22.72	3.13	100.00

## APPENDIX F

Table F-1. 1984 JES Respondent Versus SSN Response Type For Individually Operated Tracts, North Dakota

	: :	SSN	Response	Туре		
,	: :	:	Non-	•	•	•
DES	:New :	Verified:	Verified	:Inaccessi-	:	:
Respondent	:SSN :	SSN :	<u>SSN</u>	: ble	: Refusal	: Total
Operator #		385	21	88	17	767 71 05
%	24.02	36.12	1.97	8.26	1.59	71.95
Spouse #		14	5	27	1	59
%	1.13	1.31	0.47	2.53	0.09	5.54
Other #		27	19	79	0	128
. %	0.28	2.53	1.78	7.41	0.00	12.01
Refusal #		1	3	6	49	61
%	0.19	0.09	0.28	0.56	4.60	5.72
No Respon-						
dent #	0	0	5	46	0	51
%	0.00	0.00	0.47	4.32	0.00	4.78
Total #		427	53	246	67	1066
%	25.61	40.06	4.97	23.08	6.28	100

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

		:	:	SSN	Response	Туре		
		:	:-	:	Non-	•	•	:
DES		:New	:	Verified:	Verified	:Inaccessi-	-:	:
Responder	nt	:SSN	_:_	SSN :	SSN	: ble	: Refusal	: Total
Operator	#	241		385	9	42	43	720
oper acor	%	24.	03	38.38	0.90	4.19	4.29	71.79
Spouse	#	31		48	2	37	6	124
•	%	3.	09	4.79	0.20	3.69	0.60	12.36
Other	# %	2 0.		22	7	41	4	76
	%	0.	20	2.19	0.70	4.09	0.40	7.58
Refusal	#	0		4	3	0	54	61
	%	0.	00	0.40	0.30	0.00	5.38	6.08
No Respor	۱-							
dent	#	0		0	2	19	1	22
	%	0.	00	0.00	0.20	1.89	0.10	2.19
Total	#	274		459	23	139	108	1003
	%	27.	32	45.76	2.29	13.86	10.77	100.00

## APPENDIX F

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

		:	:_	SSN	Response	Туре		
		:	:	:	Non-	:	:	•
DES		:New	:	Verified:	Verified	:Inaccessi-	:	:
Responder	ıt	:SSN	:	SSN :	SSN	: ble	: Refusal	: Total
Operator	# %	179 19.	87	257 28.52	7 0.78	148 16.43	22 2. <b>44</b>	613 68.04
Spouse	# %	13 1.	44	25 2.77	7 0.78	18 2.00	1 0.11	64 7.10
Other	# %	2 0.	22	10 1.11	16 1./78	55 6.10	0 0.00	83 9.21
Refusal.	# %	3 0.	33	2 0 <b>.22</b>	1 0.11	8 0.89	76 8.44	90 9.99
No Respondent	1- # %	0 0.	00	1 0.11	7 0.78	40 4.44	3 0.33	51 5.66
Total	# %	197 21.	86	295 32.7 <b>4</b>	38 4.22	269 29.86	102 11.32	901 100.00

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

		: :	SSN	Response	Туре		
DES Responde	nt	: : : : : : : : : : : : : : : : : : :	: Verified: SSN :	Non- Verified SSN	: :Inaccessi-: : ble :	Refusal	: : Total
Operator	#	284	248	379	84	8	1003
	%	21.13	18.45	28.20	6.25	0. <b>6</b> 0	74.63
Spouse	#	23	34	64	47	1	169
	%	1.71	2.53	4.76	3.50	0.07	12.57
Other	#	6	19	<b>54</b>	59	0	138
	%	0.45	1.41	<b>4.</b> 02	4.39	0.00	10.27
Refusal	#	0	0	5	2	7	14
	%	0.00	0.00	0.37	0.15	0.52	1.04
No Respo dent	n – # %	0 0.00	0 0.100	7 0.52	13 0.97	0 0.00	20 1.49
Total	#	313	301	509	205	16	1344
	%	23.29	22.40	37.87	15.25	1.19	100.00

## APPENDIX F

Table F-5. 1984 JES Respondent Versus SSN Response Type For Individually Operated Tracts, Virginia

	<u>:</u>	: SSN	Response	Туре		
	:	:	Non-	:	:	:
DES	:New	: Verified:	Verified	:Inaccessi-	:	:
Respondent	:SSN	: SSN :	SSN	: ble	: Refusal	: Total
Operator #	215	244	35	35	14	543
%	24.1	8 27.45	3.94	3.94	1.57	61.08
Spouse #	26	50	0	37	1	114
%	2.9		0.00	4.16	0.11	12.81
Other #	9	7	18	176	0	210
Other #	1.0	1 0.79	2.02	19.8	0.00	23.62
Refusal #	0	0	0	0	5	5
%	0.0	0.00	0.00	0.00	0.56	0.56
No Respon-						
dent #	0	0	0.	15	2	17
%	0.0		0.00	1.69	0.22	1.91
Total #	250	301	53	263	22	889
%	28.1		5.96	29.58	2.46	100.00