

The Social Security Administration's 10-Percent Sample File of OASDI Beneficiaries

*by John W. Wagner**

This is another in a series of technical articles describing Social Security Administration sample files and statistical systems. The focus of this article is the 10-percent sample file that provides program and demographic information on Social Security beneficiaries under the Old-Age, Survivors, and Disability Insurance program. The article explains the contents and availability of the 10-percent sample and presents several statistical tabulations as examples of the wide variety of data that can be developed from the file.

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As soon as the Social Security Act became law, the Social Security Administration (SSA) established a system of administrative recordkeeping to process Social Security claims. One of the earliest such files was the Master Beneficiary Record (MBR). The MBR is used today to provide the data needed to calculate benefit amounts under the Old-Age, Survivors, and Disability Insurance (OASDI) program and to generate benefit checks.

The MBR is massive: it has one record for each claim account number (CAN)—the Social Security number of the wage earner under which benefits are paid. These records are of variable length and contain data on all types of Social Security beneficiaries (workers, wives, husbands, widows, widowers, children, and other dependents) who are receiving benefits under that CAN. Since October 1977, all persons who apply for OASDI benefits—as well as those actually receiving benefits—have been included in the MBR file.

Over the years, the MBR has evolved from a “payment file” to become the agency’s major administrative data base.¹ It is an extremely valuable resource to the Office of Research and Statistics (ORS), the SSA component that provides the agency with statistical analyses and research on Social Security programs, the administration of those programs, and the interaction of those programs with the national economy.²

At first, ORS used the entire MBR file to generate the data it needed. Because of the volume of records and lengthy processing time involved, however, the resulting statistics were not always current enough to meet ORS’s needs. To solve this problem, ORS began, in the early 1980’s, to extract a 10-percent sample file from the MBR. This sample file enabled ORS to carry out its mission and to quickly produce the data needed to answer specific questions about Social Security programs.

The Office of Research and Statistics originally developed the 10-percent file to improve the timeliness of State and county data on Social Security

Chart 1.—Data elements in the 10-percent sample file

Acronym	Data description	Position	Acronym	Data description	Position
CAN	Claim account number	1-9	TAC-2	Type of action code (2-bit 0, 1)	59
BIC	Beneficiary identification code	10-11	SEOB	Sex of beneficiary (M, F)	60
AGE	Age (xxx) as of 06/91	12-14	ROP	Race of primary (W, B, O, U)	61
DODP	Date of death of primary (YY)	15-16	DAC	Disability award code	62
DOBP	Date of birth of primary (YY)	17-18	DDC	Direct deposit code	63
DOCE	Date of current entitlement (MMYY)	19-22	DOCA	Date of credit action (YY)	64-65
PIA	Primary insurance amount (\$\$\$\$c)	23-27	PIFC	Primary insurance factor code	66
MBC	Monthly benefit credited (\$\$\$\$c)	28-32	SISC	Security income status code	67
SIFT	Security income file type	33	TOC	Type of claim	68
TOP	Type of payee	34	OFC	Offset code	69
CC	Custody code	35	SOP	Sex of primary (M, F, U)	70
TOD	Type of dual entitlement code	36	LAF	Ledger account file	71-72
DESC	Dual entitlement status code	37	OFDC	Offset date code	73
ZIP	ZIP Code	38-42	CRIMC	Cumulative retirement increment months	74-76
SCC	State/county code	43-47	OTOC	Other office code	77
GSCC	Generated State/county code	48-52	LEMBA	Larger excess MBA (\$\$\$c)	78-82
DOC	District office code	53-55	SAMBA	Smaller actuarially reduced MBA (\$\$\$c)	83-97
HENC	Hospital Insurance entitlement code	56	OTBIC	Other BIC	88-89
PCOC	Payment center office code	57	BPC	Benefit payment code	90
GS	Guardianship status	58	BLANK		91-96

beneficiaries. Currently, all county data published by ORS are based on 100-percent data. The 10-percent sample file is used for some State-level publications, and 10-percent county tabulations are prepared to provide preliminary estimates of county distributions.

Once the sample estimates were proven to be reliable in the geographic area, additional data elements from the MBR were added to the 10-percent file. The file is now used for a variety of ongoing projects, including the production of many of the statistical tables in the *Annual Statistical Supplement to the Social Security Bulletin*.³ Other statistical samples maintained by ORS and researchers at the Health Care Financing Administration (HCFA) are, by design, subsamples of the 10-percent sample:

- 1-Percent OASDI Sample.⁴ (The most recent file derived from this sample provides a longitudinal look at retired-worker beneficiaries.)
- 1-Percent Continuous Work History Sample.⁵ (Tabulations and micro-data files from the sample data bases are regularly used in making trust fund revenue estimates.)

- 5-Percent Continuous Medicare History Sample.⁶ This file is maintained by HCFA. It is longitudinal in structure and provides information on Medicare utilization and reimbursement.

The 10-percent OASDI sample file is used by the staff of the Office of Research and Statistics and by other SSA employees who need its program and demographic data. Information on how to access the file can be found at the conclusion of this article.

Description of the File

In June 1991, the 10-percent sample file contained records for 4,379,000 Social Security beneficiaries. Of these, 4,015,290 persons were in current-payment status—that is, they received a Social Security benefit for June. The remainder of the records were for persons whose benefits were being withheld (mostly persons whose benefits were suspended because of excess earnings) or whose benefits were terminated in the past 12 months.

Each data record contains 96 characters of information. Data elements in the extract may vary depending on the needs of its users. At

present, the file contains the items highlighted in chart 1. The acronyms are those in the MBR data dictionary.⁷ Details concerning the content of each of these fields can be found in that document.

The following tabulation shows a number of broad programmatic and demographic areas and the appropriate data elements related to those areas:

Subject	Data element
Type of beneficiary . . .	BIC, TOC
Entitlement and current payments	DOCE, DOCA, LAF, TAC-2
Payment amount	PIA, MBC, PIFC, CRIMC
Representative payment.	TOP, CC
Dual entitlement	LEMBA, SAMBA, OTBIC, DESC, TOD
Geographic location . . .	ZIP, SCC, GSCC, DOC, PCOC
Demographic data	AGE, DODP, DOBP, SEOB, ROP, SOP
SSI payment status	SIFT, SISC

Sample Tabulations

Further uses of the 10-percent sample can be demonstrated by examining four tables based on information obtained from the file. The tables also indicate the sample sizes available for various analyses of subgroups of the beneficiary population.⁸ The tables include only those Social Security beneficiaries who are in current-payment status.

Family Benefit Data

The 10-percent sample data can be summarized by claim numbers to produce estimates related to beneficiary families—groups of individuals receiving benefits on the same claim account number. This means, for example, a divorced wife is grouped with her former husband (and his current wife, if there is one). However, the records do not identify all “families” as they are usually defined. For example, if both a husband and his wife receive benefits solely on the basis of their individual earnings records, they have different claim account numbers and cannot be identified as a married-couple family. Table 1 shows the total number of families, the number of beneficiaries, and the average family benefit amount by type of benefit. Most beneficiary families are composed of one person only—the worker or the surviving spouse. Most beneficiary families that have two or more recipients involve child beneficiaries.

Generally, families with the largest benefits are those with the most members. The average family benefit for workers with children is about \$933; aged widow(er)s with children, \$978; and widowed young mothers with children, \$1,115.

Dual Entitlement

A person can become entitled to two types of benefits for the same month (dual entitlement). A woman may, for example, be entitled to payments both as a retired worker and as a wife.⁹

Table 2 shows that out of the 40 million beneficiaries, almost 5 million

Table 1.—OASDI benefits in current-payment status: Number of beneficiary families, number of beneficiaries, and average monthly family benefit amount, by type of family, June 1991

Type of family	Number of families	Number of beneficiaries	Average family benefit amount
Total ¹	34,074,390	39,783,300	\$635.80
Worker only	23,914,590	23,914,590	586.40
Worker and aged spouse	3,010,980	6,021,960	1,025.50
Worker, aged spouse, and children	38,890	127,490	1,148.70
Worker, young wife, and children	297,510	1,139,660	1,054.90
Worker and children	582,430	1,393,050	932.80
Children only	851,370	1,121,990	553.30
Aged widow(er)	4,857,890	4,857,890	557.90
Aged widow(er) with children	91,050	187,890	977.70
Widowed young mother with children	280,590	792,950	1,114.90
Widowed young father with children	15,410	45,170	768.60
Disabled widow	93,140	93,140	391.30
Disabled widower	1,560	1,560	232.60
Disabled widow(er) with children	5,170	11,140	818.70
Parents	5,150	5,150	496.50
Two or more widows	23,340	46,760	1,195.50
Two or more widows with children	5,320	22,910	1,370.90

¹ Excludes about 369,000 beneficiaries with inconsistent combinations and some family members whose benefits were not in current-payment status.

are receiving benefits based on more than one account. Most of these dually entitled beneficiaries are women who have been able to establish entitlement to Social Security benefits based on their own work record, but their low earnings relative to their husbands or small number of years in the workforce have resulted in their receiving lower benefit amounts than they are entitled to based on their spouse's earnings record. As a result, they receive their worker's benefit plus the difference between that amount and the benefit they would receive as a spouse.

The data extracted from the 10-percent file indicate that in about 65 percent of the cases the benefit a

person receives on his or her own earnings record is higher than the benefit that he or she would receive on their spouse's record. About 35 percent of dually entitled beneficiaries actually receive a secondary benefit (that is, the part of the benefit from another account) which is greater than the first. In those cases, the secondary benefit is, on average, almost twice as large as the first (\$401.10, compared with \$217.60).

Geographic Data

Table 3 presents an estimate of the number of Social Security beneficiaries by State and the distribution of

Table 2.—OASDI benefits in current-payment status: Number of workers with dual entitlement to a secondary benefit, by type of worker benefit and secondary benefit, and by size of secondary benefit, compared with worker benefit, June 1991

Type of secondary benefit	Workers with dual entitlement	Worker benefit larger than secondary benefit				Secondary benefit larger than worker benefit			
		Number	Average monthly amount of—			Number	Average monthly amount of—		
			Total benefit	Worker benefit	Secondary benefit		Total benefit	Worker benefit	Secondary benefit
Total	4,949,520	3,229,920	\$491.10	\$358.10	\$133.10	1,719,600	\$618.70	\$217.60	\$401.10
Retired workers									
Total	4,851,300	3,155,380	490.40	357.80	132.60	1,695,920	619.20	217.50	401.70
Spouses.....	2,136,600	1,548,000	355.90	266.40	89.60	588,600	389.50	147.30	242.20
Husbands.....	26,290	23,620	332.90	259.70	73.20	2,670	367.40	145.80	221.60
Wives.....	2,110,310	1,524,380	356.30	266.50	89.80	585,930	389.60	147.30	242.20
Children.....	850	760	397.20	284.50	112.70	90	424.80	180.30	244.50
Male.....	460	420	414.40	302.30	112.20	40	388.80	171.10	217.60
Female.....	390	340	376.00	262.60	113.30	50	453.60	187.60	265.90
Widow(er)s.....	2,712,410	1,605,860	620.00	445.90	174.00	1,106,550	741.40	254.80	486.60
Widowers.....	78,420	69,680	617.10	492.30	124.80	8,740	708.80	276.00	432.80
Widows.....	2,633,990	1,536,180	620.10	443.80	176.20	1,097,810	741.70	254.60	487.10
Parents.....	1,440	760	506.40	337.40	169.10	680	663.70	243.00	420.80
Father.....	60	30	371.30	226.70	144.60	30	555.80	240.00	315.80
Mother.....	1,380	730	512.00	341.90	170.10	650	668.70	243.10	425.60
Disabled workers									
Total	98,220	74,540	524.50	370.50	154.00	23,680	582.90	226.90	355.90
Spouses.....	11,430	10,350	390.40	307.80	82.60	1,080	363.70	155.50	208.20
Husbands.....	90	90	306.90	257.80	49.00
Wives.....	11,340	10,260	391.20	308.30	82.90	1,080	363.70	155.50	208.20
Children.....	34,290	24,260	429.90	304.10	125.70	10,030	536.20	202.90	333.30
Male.....	21,490	15,440	433.10	310.30	122.80	6,050	533.80	203.90	329.90
Female.....	12,800	8,820	424.30	293.40	130.90	3,980	539.80	201.30	338.50
Widow(er)s.....	52,500	39,930	616.70	427.00	189.70	12,570	639.00	252.30	386.70
Widowers.....	820	780	600.80	483.10	117.70	40	618.20	252.90	365.20
Widows.....	51,680	39,150	617.10	425.90	191.20	12,530	639.00	252.30	386.80

beneficiaries by type-of-beneficiary groups in 1991. The number of beneficiaries ranges from 34,720 (3,472 sample cases) in Alaska to 3,701,080 (370,108 sample cases) in California. An additional 343,470 beneficiaries (34,347 sample cases) reside in foreign countries. (Country of residence is contained in the field containing the State code.)

This table could be easily expanded to show the same information for a more detailed geographic base—such as the counties or ZIP Codes within each State or by district office service areas or regions. And the table could be expanded even further to show various other data—for example, sex, race, or representative payee status or information on primary insurance amounts or benefit amounts.

Representative Payment

Where there is evidence that a beneficiary is not able to manage or direct the management of benefit payments in his or her own best interest, a representative payee may be established. Table 4 shows the number of beneficiaries by payee status and type of benefit. Those who have a representative payee are further shown by their type of residence (institutional or noninstitutional).¹⁰ More than half the beneficiaries with representative payees are minor children. Virtually all minor children have representative payees. For more than 90 percent of them, their parents are the payees.

Among other groups with large numbers of representative payees are about 80 percent of disabled adult children; about 30 percent are living in

an institutional setting. About 27 percent of Prouty (special age-72) beneficiaries have a representative payee; about 90 percent of them are institutionalized.

The codes used to denote institutionalization status can provide additional information about the type of institution. Is it a mental or nonmental institution? Is it a public or private facility? Public institutions can be further identified as Federal, State, or local operations.

Availability

The 10-percent OASDI sample file is extracted from the Master Beneficiary Record in June and December of each year. The data are generally available within 2 months of the extraction date

Table 3.—OASDI benefits in current-payment status: Number of beneficiaries, by type of benefit and State, June 1991

State	Total	Retired workers	Disabled workers	Disabled widows and children	Other nondisabled adults	Children under age 18
Total	40,152,900	25,006,400	3,096,160	719,490	8,797,460	2,533,390
Alabama	716,170	391,270	70,090	16,530	175,360	62,920
Alaska	34,720	19,740	3,150	610	6,390	4,830
Arizona	597,490	389,100	45,560	6,580	118,810	37,440
Arkansas	467,810	266,720	46,930	8,740	109,150	36,270
California	3,701,080	2,363,780	287,790	52,230	766,300	230,980
Colorado	425,490	261,070	35,490	5,720	96,780	26,430
Connecticut	530,010	375,650	32,000	8,530	92,440	21,390
Delaware	106,970	69,820	8,030	1,830	21,670	5,620
District of Columbia	78,650	50,400	5,890	1,690	15,320	5,350
Florida	2,688,060	1,835,320	165,050	28,680	530,670	128,340
Georgia	892,290	509,810	94,410	20,080	188,930	79,060
Hawaii	149,500	103,750	7,740	2,240	26,010	9,760
Idaho	159,100	100,430	11,100	2,260	34,640	10,670
Illinois	1,759,290	1,130,000	122,720	32,480	372,220	101,870
Indiana	911,030	570,890	70,860	17,120	195,460	56,700
Iowa	524,300	333,110	32,230	9,570	127,420	22,150
Kansas	411,660	266,920	24,430	6,430	92,750	21,130
Kentucky	651,420	340,820	71,090	16,550	168,600	54,360
Louisiana	655,330	322,890	63,780	16,550	182,420	69,690
Maine	216,770	136,550	18,390	4,250	46,260	11,320
Maryland	616,920	398,210	41,530	10,820	130,470	35,890
Massachusetts	980,020	662,400	72,320	16,850	185,630	42,820
Michigan	1,505,680	922,030	120,190	31,210	338,810	93,440
Minnesota	671,930	436,580	39,510	10,780	155,500	29,560
Mississippi	453,070	240,960	51,570	11,000	101,440	48,100
Missouri	912,480	568,330	74,630	15,830	198,850	54,840
Montana	140,600	84,410	12,380	1,970	31,880	9,960
Nebraska	268,610	172,310	15,570	3,930	63,830	12,970
Nevada	171,950	117,490	13,490	1,120	29,590	10,260
New Hampshire	164,440	113,240	11,100	2,640	29,050	8,410
New Jersey	1,229,460	842,480	81,670	19,160	228,240	57,910
New Mexico	221,610	126,570	18,640	3,390	52,270	20,740
New York	2,845,580	1,878,610	214,180	55,360	542,370	155,060
North Carolina	1,095,880	671,170	106,780	22,610	220,930	74,390
North Dakota	112,370	66,930	6,380	2,200	31,990	4,870
Ohio	1,816,660	1,083,680	138,240	37,050	454,430	103,260
Oklahoma	534,030	325,300	38,720	8,500	128,230	33,280
Oregon	501,900	334,610	32,720	6,580	101,880	26,110
Pennsylvania	2,252,180	1,457,570	140,610	39,390	519,090	95,520
Rhode Island	182,230	127,920	13,280	3,430	29,620	7,980
South Carolina	550,200	326,800	57,560	12,560	107,250	46,030
South Dakota	129,500	78,910	8,300	2,370	32,510	7,410
Tennessee	833,530	480,590	82,010	18,640	192,390	59,900
Texas	2,215,240	1,281,390	152,130	36,450	561,880	183,390
Utah	194,270	121,440	13,120	2,720	40,200	16,790
Vermont	88,490	56,370	7,080	1,530	18,610	4,900
Virginia	845,310	513,890	71,730	17,770	190,460	51,460
Washington	720,090	471,860	52,280	9,990	147,790	38,170
West Virginia	371,400	188,310	37,180	10,820	107,330	27,760
Wisconsin	844,690	548,570	59,760	15,700	179,020	41,640
Wyoming	63,290	40,310	4,510	730	13,130	4,610
Puerto Rico	565,880	238,800	77,760	20,920	139,530	88,870
Other areas ¹	19,220	8,280	1,550	430	4,090	4,870
Foreign	343,470	180,000	10,470	5,170	117,740	30,090
Unknown ²	13,580	2,040	480	1,200	4,010	5,850

¹ Includes American Samoa, Guam, and Virgin Islands.

² State code unknown.

Table 4.—OASDI benefits in current-payment status: Number and percentage distribution of beneficiaries with and without representative payee, by type of benefit and by type of payee, June 1991

Type of benefit	Total		Without representative payee		With representative payee		Institution is payee		Other payee	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	40,152,900	100.0	36,154,880	90.0	3,998,020	10.0	544,370	1.4	3,453,650	8.6
Retired workers....	25,006,400	100.0	24,659,390	98.6	347,010	1.4	206,910	.8	140,100	.6
Disabled workers...	3,096,160	100.0	2,654,220	85.7	441,940	14.3	77,800	2.5	364,140	11.8
Other disabled beneficiaries	719,490	100.0	204,900	28.5	514,590	71.5	157,960	22.0	356,630	49.6
Disabled widow(er)s	108,410	100.0	94,130	86.8	14,280	13.2	2,800	2.6	11,480	10.6
Disabled adult children	611,080	100.0	110,770	18.1	500,310	81.9	155,160	25.4	345,150	56.5
Other nondisabled adults	8,797,460	100.0	8,633,330	98.1	164,130	1.9	97,340	1.1	66,790	.8
Spouses	3,358,790	100.0	3,337,570	99.4	21,220	.6	9,740	.3	11,480	.3
Widow(er)s	5,303,640	100.0	5,169,390	97.5	134,250	2.5	85,990	1.6	48,260	.9
Parents	5,450	100.0	5,160	94.7	290	5.3	130	2.4	160	2.9
Special age-72 beneficiaries ...	5,980	100.0	4,380	73.2	1,600	26.8	1,440	24.1	160	2.7
Students age 18-19..	123,600	100.0	116,830	94.5	6,770	5.5	40	.0	6,730	5.4
Children under age 18	2,533,390	100.0	3,040	.1	2,530,350	99.9	4,360	.2	2,525,990	99.7
With parent payee	2,310,480	100.0	0	0	2,310,480	100.0	0	0	2,310,480	100.0
With nonparent payee	222,910	100.0	3,040	1.4	219,870	98.6	4,360	2.0	215,510	96.7

and, upon special request, can be extracted for any month of the year. A great variety of characteristics of the Social Security beneficiary population can be described using this sample, as was shown in tables 1-4.

The file is now available for use by SSA analysts outside of the Office of Research and Statistics through SSA's Management Information Support Facility (MISF). The MISF can be accessed by SSA personnel in both central and regional offices.

Instructions on how to access the file are available through DIAL-UP.¹¹ The file may also be used by researchers outside SSA; interested persons should submit their proposals to:

Director
Office of Research and Statistics
Social Security Administration
Room 205, Van Ness Center
4301 Connecticut Ave., NW
Washington, DC 20008

Notes

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¹ For information on the development of the MBR, see Lewis F. Frain, "The Monthly OASDI One-Percent Sample File," *Social Security Bulletin*, June 1989, pp. 8-15.

² For a detailed description of the work done by ORS, see Erma W. Barron, "The Role of Research and Statistics in the Development of Social Security," *Social Security Bulletin*, November 1985, pp. 5-21.

³ For current-payment data based on the 10-percent sample, see the *1991 Annual Statistical Supplement to the Social Security Bulletin*, pp. 149-159, table 5.A1. For data based on a 100-percent basis, see the 1988 edition, pp. 142-159, table 5.A1(1986).

⁴ Frain, *op. cit.*

⁵ Creston M. Smith, "The Social Security Administration's Continuous Work

History Sample," *Social Security Bulletin*, October 1989, pp. 20-28.

⁶ Health Care Financing Administration, *Medicare Statistical Files Manual*, Bureau of Data Management and Strategy, April 1987.

⁷ Office of Software Improvement and Engineering, Data Base Administration Branch, *Record Specification for the Master Beneficiary Record—MBR 7080 Spread*, Social Security Administration, February 1991.

⁸ Estimates of the sampling variability may be obtained by the usual techniques for simple random samples from finite populations.

⁹ For more information on dual entitlement, see Barbara A. Lingg, "Women Beneficiaries Aged 62 or Older, 1960-88," *Social Security Bulletin*, July 1990, pp. 2-12.

¹⁰ Beneficiaries with institutional payees are not the only beneficiaries residing in institutions. Coded payee data in the MBR does not show the type of residence of beneficiaries who are their own payee.

¹¹ For additional information, contact Joel Packman, ORS: (410) 965-5530.