

# **RRB - SSA - CMS FINANCIAL INTERCHANGE**

**Calculations for Fiscal Year 2024  
With Respect to OASI, DI, and HI Trust Funds**

**Summary and Documentation**

**73rd Determination**

---

**Prepared jointly by**

**U.S. RAILROAD RETIREMENT BOARD  
SOCIAL SECURITY ADMINISTRATION  
and  
CENTERS FOR MEDICARE & MEDICAID SERVICES**



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**Compiled by  
U.S. RAILROAD RETIREMENT BOARD  
CHICAGO, ILLINOIS  
October, 2025**



## **INTRODUCTION**

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The financial interchange between the railroad retirement and social security systems is intended to place the Social Security Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds and the Centers for Medicare and Medicaid Services Hospital Insurance (HI) Trust Fund in the same condition they would have been had railroad employment been covered by the Social Security and Federal Insurance Contributions Acts. Every year estimates are made of the additional benefits and administrative expenses that would have been paid from the Trust Funds as well as the additional payroll taxes and income taxes that would have been received by them, with allowances for interest.

This booklet documents the determination through fiscal year 2024. Included are the official determination and certification documents and a summary of the results of the determination. Exhibit 1 provides details on the benefit, administrative cost, income tax, and interest calculations for the determination. Exhibit 2 covers the payroll calculations.

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**DETERMINATIONS PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED**

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**DETERMINATION PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED**

Pursuant to the provisions of section 7(c)(2) of the Railroad Retirement Act of 1974, as amended, the Commissioner of Social Security and the Railroad Retirement Board have determined that, as of the close of the fiscal year ended September 30, 2024, the subtraction of \$5,868,400,000 from the Federal Old-Age and Survivors Insurance Trust Fund and the addition of \$1,400,000 to the Federal Disability Insurance Trust Fund would place such Funds in the same position in which they would have been if service as an employee after December 31, 1936, covered by said Railroad Retirement Act, had been included in the term "employment" as defined in the Social Security Act and in the Federal Insurance Contributions Act.

The amount of \$5,868,400,000 for the Federal Old-Age and Survivors Insurance Trust Fund is based on expenditures of \$8,606,300,000 in benefit payments, \$17,500,000 in administrative expenses, less payroll taxes of \$2,339,600,000, net income taxes of \$432,500,000, and a pre-1957 military service adjustment of \$41,900,000, plus net interest of \$58,600,000. The amount of \$1,400,000 for the Federal Disability Insurance Trust Fund is based on expenditures of \$394,300,000 in benefit payments, \$600,000 in administrative expenses, less payroll taxes of \$397,200,000 and net income taxes of \$2,000,000, plus net interest of \$2,900,000.

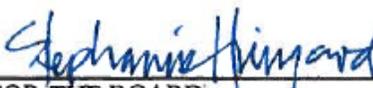
It is understood by the Commissioner and the Board that the determination of the amounts specified herein is made without prejudice to settlement of any unresolved questions between the Commissioner and the Board, relative to the provisions of section 7(c)(2) of the Railroad Retirement Act, in making any subsequent determinations pursuant to such section.

**IN WITNESS WHEREOF** the Commissioner of Social Security and the Railroad Retirement Board, by its Secretary to the Board, have hereunto set their respective hands and caused, respectively, the seals of the Social Security Administration and the Railroad Retirement Board to be affixed.

**Social Security Administration**

By   
Commissioner of Social Security  
6/2/25  
Date signed

**Railroad Retirement Board**

By   
FOR THE BOARD  
Secretary to the Board  
5.19.2025  
Date signed

DETERMINATION PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED

Pursuant to the provisions of section 7(c)(2) of the Railroad Retirement Act of 1974, as amended, the Secretary of Health and Human Services and the Railroad Retirement Board have determined that, as of the close of the fiscal year ended September 30, 2024, the addition of \$701,000,000 to the Federal Hospital Insurance Trust Fund would place such Fund in the same position in which it would have been if service as an employee after December 31, 1936, covered by said Railroad Retirement Act, had been included in the term "employment" as defined in the Social Security Act and in the Federal Insurance Contributions Act.

The amount of \$701,000,000 for the Federal Hospital Insurance Trust Fund is based on payroll taxes of \$676,900,000 and net income taxes of \$10,700,000, less administrative expenses of \$1,400,000, plus net interest of \$14,800,000.

It is understood by the Secretary and the Board that the determination of the amounts specified herein is made without prejudice to settlement of any unresolved questions between the Secretary and the Board, relative to the provisions of section 7(c)(2) of the Railroad Retirement Act, in making any subsequent determinations pursuant to such section.

**IN WITNESS WHEREOF** the Administrator of the Centers for Medicare & Medicaid Services, acting herein by virtue of authority vested in them by the Secretary of Health and Human Services, and the Railroad Retirement Board, by its Secretary to the Board, have hereunto set their respective hands and caused, respectively, the seals of the Department of Health and Human Services and the Railroad Retirement Board to be affixed.

**Secretary of Health and Human Services**

By DR [Signature]  
Administrator of the Centers for  
Medicare & Medicaid Services  
5 June 2025  
Date signed

**Railroad Retirement Board**

By Stephanie Hileyard  
FOR THE BOARD  
Secretary to the Board  
MAY 12 2025  
Date signed

**CERTIFICATIONS PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED**

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**CERTIFICATION PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED**

Pursuant to the provisions of section 7(c)(2) of the Railroad Retirement Act of 1974, as amended, the Commissioner of Social Security and the Railroad Retirement Board have determined that, as of the close of the fiscal year ended September 30, 2024, the amount of \$5,868,400,000 if subtracted from the Federal Old-Age and Survivors Insurance Trust Fund, would place such Fund in the same position in which it would have been if service as an employee after December 31, 1936, covered by said Railroad Retirement Act, had been included in the term "employment" as defined in the Social Security Act and in the Federal Insurance Contributions Act.

The amount of \$5,868,400,000 for the Federal Old-Age and Survivors Insurance Trust Fund is based on expenditures of \$8,606,300,000 in benefit payments, \$17,500,000 in administrative expenses, less payroll taxes of \$2,339,600,000, net income taxes of \$432,500,000, and a pre-1957 military service adjustment of \$41,900,000, plus net interest of \$58,600,000.

The Commissioner of Social Security hereby certifies to the Secretary of the Treasury, pursuant to the provisions of such section 7(c)(2), the amount of \$5,996,420,000 including interest of \$128,020,000 for the period October 1, 2024 to the date of certification, for transfer from the Federal Old-Age and Survivors Insurance Trust Fund to the Social Security Equivalent Benefit Account.

Certified as of the 2nd day of June 2025.

**IN WITNESS WHEREOF** the Commissioner of Social Security has hereunto set their hand and caused the seal of the Social Security Administration to be affixed.

**Social Security Administration**

By   
Commissioner of Social Security  
6/2/25  
Date signed

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CERTIFICATION PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED

Pursuant to the provisions of section 7(c)(2) of the Railroad Retirement Act of 1974, as amended, the Commissioner of Social Security and the Railroad Retirement Board have determined that, as of the close of the fiscal year ended September 30, 2024, the amount of \$1,400,000, if added to the Federal Disability Insurance Trust Fund, would place such Fund in the same position in which it would have been if service as an employee after December 31, 1936, covered by said Railroad Retirement Act, had been included in the term "employment" as defined in the Social Security Act and in the Federal Insurance Contributions Act.

The amount of \$1,400,000 for the Federal Disability Insurance Trust Fund is based on expenditures of \$394,300,000 in benefit payments, \$600,000 in administrative expenses, less payroll taxes of \$397,200,000 and net income taxes of \$2,000,000, plus net interest of \$2,900,000.

The Railroad Retirement Board hereby certifies to the Secretary of the Treasury, pursuant to the provisions of such section 7(c)(2), the amount of \$1,431,000, including interest of \$31,000 for the period October 1, 2024 to the date of certification, for transfer from the Social Security Equivalent Benefit Account to the Federal Disability Insurance Trust Fund.

Certified as of the 2nd day of June 2025.

**IN WITNESS WHEREOF** the Secretary to the Board of the Railroad Retirement Board, herein by virtue of authority vested in them by the Railroad Retirement Board, has hereunto set their hand and caused the seal of the Railroad Retirement Board to be affixed.

**Railroad Retirement Board**

By Stephanie Hayward  
FOR THE BOARD  
Secretary to the Board  
5.19.2025  
Date signed

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CERTIFICATION PURSUANT TO SECTION 7(c)(2)  
OF THE RAILROAD RETIREMENT ACT OF 1974, AS AMENDED

Pursuant to the provisions of section 7(c)(2) of the Railroad Retirement Act of 1974, as amended, the Secretary of Health and Human Services and the Railroad Retirement Board have determined that, as of the close of the fiscal year ended September 30, 2024, the amount of \$701,000,000, if added to the Federal Hospital Insurance Trust Fund, would place such Fund in the same position in which it would have been if service as an employee after December 31, 1936, covered by said Railroad Retirement Act, had been included in the term "employment" as defined in the Social Security Act and in the Federal Insurance Contributions Act.

The amount of \$701,000,000 for the Federal Hospital Insurance Trust Fund is based on payroll taxes of \$676,900,000 and net income taxes of \$10,700,000, less administrative expenses of \$1,400,000, plus net interest of \$14,800,000.

The Railroad Retirement Board hereby certifies to the Secretary of the Treasury, pursuant to the provisions of such section 7(c)(2), the amount of \$716,292,000, comprised of \$686,200,000 in principal, net interest of \$14,800,000 through September 30, 2024, plus \$15,292,000 in interest for the period October 1, 2024 to the date of certification, for transfer from the Social Security Equivalent Benefit Account to the Federal Hospital Insurance Trust Fund.

Certified as of the 2nd day of June 2025.

**IN WITNESS WHEREOF** the Secretary to the Board of the Railroad Retirement Board, acting herein by virtue of authority vested in them by the Railroad Retirement Board, has hereunto set their hand and caused the seal of the Railroad Retirement Board to be affixed.

**Railroad Retirement Board**

By Stephanie Hilgard  
FOR THE BOARD  
Secretary to the Board  
MAY 12 2025  
Date signed \_\_\_\_\_



**RESULTS OF DETERMINATION THROUGH FISCAL YEAR 2024**


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**RRB-SSA-CMS Financial Interchange  
Results of Determination through Fiscal Year 2024**

As of September 30, 2024, the Social Security Equivalent Benefit Account (Account) was due \$5,868.4 million from the OASI Trust Fund; \$1.4 million was due from the Account to the DI Trust Fund; \$701.0 million was due from the Account to the HI Trust Fund. With the inclusion of interest to June 2, 2025, the anticipated date of transfer, the amounts to be transferred are \$5,996,420,000 from the OASI Trust Fund, \$1,431,000 to the DI Trust Fund and \$716,292,000 to the HI Trust Fund. This will result in a net transfer of \$5,278,697,000 to the Account.

The results of the calculations, including adjustments, for fiscal year 2024 are shown below, separately for each of the trust funds:

<u>OASI Trust Fund</u>	<u>Amount</u> (millions)
Amount due to Social Security Equivalent Benefit Account:	
September 30, 2023.....	\$5,757.5
Plus: Benefit payments.....	8,606.3
Administrative expenses .....	17.5
Interest.....	160.9
Less: Payroll taxes at OASI rates on railroad payroll.....	2,339.6
Pre-1957 military service adjustment.....	41.9
Income taxes (after Treasury reconciliation) .....	432.5
Transferred to Social Security Equivalent Benefit Account on June 3, 2024 (principal of \$5,757.5 million, plus interest of \$102.3 million) .....	5,859.8
Amount due to Social Security Equivalent Benefit Account:	
September 30, 2024.....	\$5,868.4
June 2, 2025 (including interest at 3.25 percent) .....	\$5,996.4
 <u>DI Trust Fund</u>	
Amount due to Social Security Equivalent Benefit Account:	
September 30, 2023.....	\$72.4
Plus: Benefit payments.....	394.3
Administrative expenses .....	0.6
Interest.....	4.2
Less: Payroll taxes at DI rates on railroad payroll.....	397.2
Income taxes (after Treasury reconciliation) .....	2.0
Transferred to Social Security Equivalent Benefit Account on June 3, 2024 (principal of \$72.4 million, plus interest of \$1.3 million) .....	73.7
Amount due to Social Security Equivalent Benefit Account:	
September 30, 2024.....	(\$1.4)
June 2, 2025 (including interest at 3.25 percent) .....	(\$1.4)

<u>HI Trust Fund</u>		<u>Amount</u> (millions)
Amount due to HI Trust Fund:		
September 30, 2023.....		\$658.8
Plus:	Payroll taxes at HI rates on railroad payroll.....	676.9
	Income taxes (after Treasury reconciliation) .....	10.7
	Interest.....	26.5
Less:	Administrative expenses .....	1.4
	Transferred to HI Trust Fund on June 3, 2024 (principal of \$658.8 million, plus interest of \$11.7 million).....	670.5
Amount due to HI Trust Fund:		
September 30, 2024.....		\$701.0
June 2, 2025 (including interest at 3.25 percent) .....		\$716.3

The net payment of \$5,278.7 million due to the Social Security Equivalent Benefit Account is \$15.7 million more than the previous determination. This increase consists of the following changes: an increase of \$321.9 million in benefit payments, offset by increases of \$197.2 million in payroll tax revenues and \$50.4 million in income tax revenues, decreases of \$2.5 million in administrative costs and \$14.2 million in total interest, and a pre-1957 military service adjustment of \$41.9 million.

Presented below is a more detailed comparison between the current and prior determinations.

#### Benefit Amounts

Overall, the additional social security benefits that would have been payable if railroads had been covered by the Social Security Act increased by 3.7 percent, or \$321.9 million, to \$9,000.6 million from the previous determination amount of \$8,678.7 million. Even with a declining number of beneficiaries again this year, higher wages for more recent retirees have resulted in larger benefit awards. Furthermore, cost-of-living increases of 8.7 percent were applied to all benefits for the first 3 months in fiscal year 2024 and 3.2 percent for the last 9 months in the fiscal year.

#### Payroll Taxes

The combined payroll tax amount creditable to the OASDHI Trust Funds increased by 6.1 percent, or \$197.2 million, to \$3,413.7 million from the previous determination amount of \$3,216.5 million. This increase was due to a higher taxable wage limit and a higher level of average employment which increased from 198,000 in fiscal year 2023 to the preliminary level of 201,000 in fiscal year 2024.

#### Income Taxes

Federal income taxes credited to the OASDHI Trust Funds increased by 12.8 percent, or \$50.4 million, to \$445.2 million from the previous determination amount of \$394.8 million. The increase in income taxes is mainly due to an increase in benefit amounts in fiscal year 2024. The current determination reflects Treasury OASDI and HI reconciliations for calendar years 2018 through 2020.

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### **Administrative Expenses**

Administrative expense reimbursements decreased by 11.4 percent, or \$2.5 million, to \$19.5 million from the previous determination amount of \$22.0 million. OASI administrative expense reimbursements increased from \$14.9 million to \$17.5 million due primarily to an increase in unit costs and the reimbursement of death master file payments, offset by a decrease in new OASI enrollments. DI administrative expense reimbursements decreased from \$4.6 million to \$0.6 million due primarily to a decrease in new DI employee enrollments, offset by an increase in unit costs. HI administrative expense reimbursements decreased from \$2.5 million to \$1.4 million, due primarily to a decrease in new enrollments, offset by an increase in unit costs.

### **Interest Charges**

Total interest charges to the OASI, DI and HI trust funds decreased by \$14.2 million to \$159.4 million from the previous determination amount of \$173.6 million. This compares to a \$34.5 million increase in total interest charges in last year's determination.

The interest to transfer crediting rate increased from 2.625% to 3.250%, which led to an increase in the interest charges to transfer date by \$20.8 million to \$112.7 million this year from \$91.9 million in the prior determination. The net interest credited to the SSEB Account and HI trust fund during the determination year increased by \$2.4 million to \$138.6 million from \$136.2 million in the prior determination. These increases were offset by a larger \$37.4 million increase in the interest charges to transfer date in the prior determination.

### **Pre-1957 Social Security Military Service**

Prior to 1957, the Department of the Treasury credited the RRB for military service performed by railroad workers. Due to the 120-month requirement introduced by P.L. 82-234 in October 1951, many of these individuals ultimately never accrued the necessary service to earn a railroad retirement annuity. Treasury had thereby credited the RRB for benefits that were eventually paid by SSA. It was therefore legislated by P.L. 88-133 in October 1963 that SSA should quantify these pre-1957 military service benefit costs and seek reimbursement through the financial interchange.

A preliminary adjustment of \$41.9 million to the OASI trust fund for the period of 2019 through 2023 is included in this year's determination. The adjustment amount was estimated from a previous projection and will be finalized in next year's determination.

**Table 1. -- RRB-SSA Financial Interchange: Change in Balance of OASI Trust Fund at End of Each Calendar Year 1937-2023, and on September 30, 2024**  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Benefit Payments <sup>2</sup>	Administrative Expenses	Military Service Adjustments	Transfers to SSEB Account <sup>3</sup>	Interest factor <sup>4</sup>		Second Semi-Annual %	Interest Creditable to SSEB Account <sup>5</sup>	Decrease in Trust Fund Balance at End of Year <sup>6</sup>
							First Semi-Annual %	Semi-Annual %			
Total	\$81,022.2	\$6,076.7	\$258,684.7	\$1,075.4	\$1,261.9	\$176,763.9		\$11,233.0			
1937	37.2		0.1				0.8819			(0.2)	(\$37.3)
1938	24.7		0.9				2.2607			(1.1)	(62.2)
1939	40.3		1.3				2.3651			(1.9)	(103.1)
1940	44.2		6.0	1.9			2.6680			(3.2)	(142.6)
1941	49.7		14.1	1.9			2.6440			(4.2)	(180.5)
1942	62.3		20.2	2.0			2.4610			(4.9)	(225.5)
1943	74.7		25.7	2.2			2.2530			(5.6)	(277.9)
1944	83.5		32.1	2.5			2.1450			(6.4)	(333.2)
1945	84.7		40.7	2.6			2.1010			(7.4)	(382.0)
1946	87.8		52.5	2.9			2.0470			(8.1)	(422.5)
1947	91.5		61.5	3.2			2.0240			(8.8)	(458.1)
1948	95.4		71.8	3.4			2.1150			(9.8)	(488.1)
1949	87.8		84.6	3.6			2.1620			(10.4)	(498.1)
1950	131.6		112.2	3.7			2.1520			(10.9)	(524.7)
1951	153.6		184.8	3.7			2.1510			(10.7)	(500.5)
1952	154.8		200.9	3.9			2.2050			(10.4)	(460.9)
1953	154.5		241.4	4.0			1.1200		1.1760	(9.4)	(379.4)
1954	179.6		270.6	3.6		(21.1)	1.1700		1.1150	(7.1)	(270.8)
1955	193.5		337.7	5.0		(7.4)	1.0510		1.1330	(3.9)	(118.1)
1956	208.1		371.1	4.4		(5.2)	1.1430		1.2430	(0.5)	54.0
1957	205.6		413.2	4.8		(1.6)	1.2390		1.2400	4.3	272.3
1958	178.8		451.8	5.5		124.4	1.2570		1.2470	9.3	435.7
1959	203.2		516.3	5.8		282.0	1.2740		1.2940	12.3	484.9
1960	259.0		578.6	6.1		318.4	1.2850		1.2940	12.8	505.0
1961	230.0		606.8	6.5		331.7	1.3410		1.3840	14.8	571.4
1962	236.9		640.8	6.3		360.8	1.3850		1.4080	17.2	638.0
1963	268.7		662.9	7.1		422.5	1.4160		1.4750	18.7	635.5
1964	265.6		675.5	7.3		402.6	1.5000		1.5510	20.0	670.1
1965	259.4		732.9	6.9		435.6	1.5490		1.5940	22.1	737.0
1966	330.2		743.4	8.2		443.8	1.6410		1.7820	25.6	740.2

**Table 1. -- RRB-SSA Financial Interchange: Change in Balance of OASI Trust Fund at End of Each Calendar Year 1937-2023, and on September 30, 2024 (Continued)**  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Benefit Payments <sup>2</sup>	Administrative Expenses	Military Service Adjustments	Transfers to SSEB Account <sup>3</sup>	Interest factor <sup>4</sup> First Semi-Annual %	Interest factor <sup>4</sup> Second Semi-Annual %	Interest Creditable to SSEB Account <sup>5</sup>	Decrease in Trust Fund Balance at End of Year <sup>6</sup>
1967	\$334.3		\$759.2	\$9.1		\$508.0	1.7750	1.9040	\$24.6	\$690.8
1968	336.6		851.7	9.8		437.6	1.9120	1.9570	27.7	805.8
1969	374.3		878.7	10.2		491.5	2.0510	2.2440	34.5	863.4
1970	366.5		1,012.7	10.6		578.8	2.3520	2.5400	43.1	984.5
1971	403.4		1,119.0	11.1		613.0	2.5140	2.5740	51.7	1,149.9
1972	441.9		1,189.7	10.8		724.3	2.5840	2.6340	58.6	1,242.8
1973	544.8		1,461.4	10.6		783.0	2.7080	2.8740	68.5	1,455.5
1974	647.3		1,581.6	11.8		908.6	2.9100	3.1530	83.5	1,576.5
1975	640.6		1,708.8	13.2		981.8	3.1670	3.2940	103.5	1,779.6
1976	707.6		1,838.2	13.1	\$47.0	1,212.3	3.2720	3.3460	112.4	1,776.4
1977	760.8		1,945.5	13.6	2.6	1,207.8	3.3650	3.4570	118.4	1,882.7
1978	795.9		2,069.1	14.0		1,588.7	3.5070	3.5370	117.2	1,698.4
1979	990.4		2,261.4	16.2		1,447.5	3.6270	3.6850	114.6	1,652.7
1980	1,089.7		2,526.5	15.0		1,442.0	4.1560	4.1810	134.6	1,797.1
1981	1,173.6		2,863.0	17.5		1,584.9	4.7750	4.9190	175.7	2,094.8
1982	1,106.9		3,167.6	19.9		1,793.3	5.0270	5.8080	238.6	2,620.7
1983	1,146.0		3,252.1	21.0		2,250.8	5.3020	5.2950	270.7	2,767.7
1984	1,303.7	\$57.0	3,370.4	21.8		2,404.0	5.1510	6.1970	284.5	2,679.7
1985	1,261.7	65.0	3,506.7	23.3		2,310.2	5.7970	5.2900	290.2	2,863.0
1986	1,235.3	68.3	3,619.0	21.4		2,585.1	5.5630	5.4800	299.1	2,913.8
1987	1,236.7	(12.0)	3,686.1	20.4		2,557.3	5.1190	4.7940	283.4	3,121.7
1988	1,289.4	4.2	3,832.6	23.2		2,790.0	4.7850	4.7740	283.3	3,177.2
1989	1,271.7	14.0	3,992.3	19.3		2,845.3	4.7436	4.6028	286.9	3,344.7
1990	1,270.5	30.5	4,182.5	18.6		2,969.3	4.5631	4.5323	298.4	3,573.9
1991	1,299.1	47.2	4,391.1	18.6		3,374.6	4.4871	4.3982	300.2	3,562.9
1992	1,329.6	53.9	4,522.8	19.1		3,148.4	4.3350	4.2187	302.3	3,875.2
1993	1,355.6	58.7	4,644.5	18.4		3,352.5	4.1602	3.9913	306.2	4,077.5
1994	1,249.5	49.4	4,693.0	17.6		3,419.6	3.9462	3.9283	317.5	4,387.1
1995	1,253.4	40.0	4,723.5	16.0	51.2	4,052.3	3.9134	3.8165	307.0	4,036.7
1996	1,285.4	55.9	4,759.8	16.8		3,554.1	3.7763	3.7618	295.6	4,213.5

**Table 1. -- RRB-SSA Financial Interchange: Change in Balance of OASI Trust Fund at End of Each Calendar Year 1937-2023, and on September 30, 2024 (Continued)**  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Benefit Payments <sup>2</sup>	Administrative Expenses	Military Service Adjustments	Transfers to SSEB Account <sup>3</sup>	First Semi-Annual %	Interest factor <sup>4</sup> Second Semi-Annual %	Interest Creditable to SSEB Account <sup>5</sup>	Decrease in Trust Fund Balance at End of Year <sup>6</sup>
1997	\$1,338.2	\$55.5	\$4,814.8	\$16.2		\$3,688.1	3.7287	3.6895	\$298.5	\$4,261.2
1998	1,407.9	72.1	4,824.9	14.1		3,662.2	3.6343	3.5192	288.6	4,246.6
1999	1,427.1	103.4	4,795.5	14.4		3,681.4	3.4594	3.4101	272.0	4,116.6
2000	1,413.3	124.5	4,815.2	13.2	\$326.1	3,538.2	3.4051	3.3607	259.2	3,802.1
2001	1,401.5	89.5	4,858.8	14.0		3,273.1	3.3149	3.2369	248.6	4,159.4
2002	1,388.3	106.7	4,857.5	14.6		3,493.3	3.2021	3.1118	253.5	4,296.7
2003	1,405.4	108.6	4,879.9	15.4		3,580.0	3.0557	2.8726	242.4	4,340.4
2004	1,468.8	107.3	4,863.8	14.5		3,628.1	2.83595	2.76720	227.1	4,241.6
2005	1,543.2	111.5	4,921.7	21.4		3,579.3	2.73860	2.63679	212.3	4,163.0
2006	1,592.8	124.5	5,076.6	18.1		3,458.0	2.62740	2.61188	207.3	4,289.7
2007	1,654.5	128.2	5,196.5	19.1		3,574.6	2.60097	2.57692	210.2	4,358.2
2008	1,715.5	104.2	5,289.7	18.1		3,632.3	2.54653	2.47843	206.5	4,420.5
2009	1,622.9	128.5	5,643.9	19.1		3,689.7	2.43765	2.35125	207.1	4,849.5
2010	1,634.9	151.3	5,682.9	22.1		3,929.7	2.33400	2.23375	212.3	5,050.9
2011	1,755.6	170.0	5,759.0	19.0		4,109.5	2.21672	2.11094	202.9	4,996.7
2012	1,837.1	273.8	6,046.0	18.7	154.8	4,139.2	2.08203	1.93802	185.3	4,841.8
2013	1,882.9	238.7	6,193.3	20.4		3,948.4	1.91434	1.81354	174.0	5,159.5
2014	2,036.0	243.8	6,359.1	20.3		4,257.1	1.80170	1.71905	168.9	5,170.9
2015	2,117.4	291.4	6,537.6	17.3		4,258.0	1.70461	1.61393	158.8	5,217.8
2016	1,835.0	295.2	6,617.4	20.8	228.9	4,286.9	1.60374	1.51971	154.6	5,364.6
2017	1,854.3	287.7	6,714.3	18.3		4,315.8	1.51297	1.44980	153.3	5,792.7
2018	1,971.7	288.8	6,920.2	16.9		4,768.9	1.44701	1.42739	155.0	5,855.4
2019	2,032.5	264.3	7,125.9	15.2		4,880.4	1.41819	1.36400	152.1	5,971.4
2020	1,850.8	288.6	7,291.5	15.8	409.4	4,844.0	1.34786	1.26296	147.8	6,033.7
2021	1,811.4	313.9	7,398.0	14.3		4,792.5	1.25012	1.17851	144.4	6,672.6
2022	1,973.1	361.7	7,776.5	14.6		5,315.8	1.17491	1.15070	147.7	6,960.8
2023	2,302.7	380.1	8,417.5	16.3		5,576.5	1.15374	1.19293	152.9	7,288.2
2024 (9-month estimate)	1,768.3	330.8	6,443.8	12.2	41.9	5,859.8	1.19956	1.24801	125.0	5,868.4

<sup>1</sup> Appropriations are net of payroll tax refunds for the calendar year.

<sup>2</sup> Uncollectible benefits overpayments are included in annual benefit payments.

<sup>3</sup> Figures in parentheses represent amounts creditable or transferred to trust fund.

<sup>4</sup> Represents rate derived from average interest rate earned by trust fund in indicated six month period (calendar year for 1937-1952). Interest factors applied to balance at beginning of period plus weighted net income in period.

<sup>5</sup> The Social Security Equivalent Benefit (SSEB) Account replaced the Railroad Retirement Account (RRA) as the Financial Interchange depository beginning in 1984.

<sup>6</sup> Figures in parentheses represent increases in trust fund balances at end of year.

NOTE - Detail may not add to totals shown because of rounding.

Table 2. -- RRB-SSA Financial Interchange: Change in Balance of DI Trust Fund at End of Each Calendar Year 1957-2023, and on September 30, 2024  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Benefit Payments <sup>2</sup>	Administrative Expenses	Military Service Adjustments	Transfers to SSEB Account <sup>3</sup>	Interest factor <sup>4</sup>		Interest Creditable to SSEB Account <sup>5</sup>	Decrease in Trust Fund Balance at End of Year <sup>6</sup>
							First Semi-Annual %	Second Semi-Annual %		
Total	\$12,379.3	\$135.8	\$20,066.7	\$253.5	\$139.6	\$8,547.4			\$880.1	
1957	23.2		2.6	0.4			1.0830	1.1680	(0.2)	(\$20.4)
1958	22.6		19.4	0.7			1.1900	1.2240	(0.5)	(23.4)
1959	22.7		26.0	0.9	(22.0)		1.2310	1.2560	(0.2)	2.6
1960	23.8		31.8	1.1	(4.9)		1.2880	1.3160	0.3	16.9
1961	20.9		34.3	1.2	5.1		1.3840	1.4460	0.6	27.0
1962	20.7		36.5	1.3	11.0		1.4280	1.4720	0.9	34.0
1963	19.9		38.1	1.6	19.6		1.4730	1.5060	1.0	35.2
1964	19.7		39.3	2.0	19.1		1.5320	1.6030	1.2	38.9
1965	19.2		48.1	1.7	23.6		1.5930	1.7350	1.4	47.3
1966	33.0		52.1	2.0	25.0		1.8360	1.8570	1.7	45.1
1967	33.0		53.2	2.3	30.6		1.9810	2.1040	1.6	38.6
1968	48.0		59.0	2.0	20.4		1.9860	2.3090	1.5	32.7
1969	48.0		59.5	1.7	21.3		2.4080	2.6100	1.4	26.0
1970	55.1		67.8	2.6	10.4		2.7940	2.9450	1.6	32.5
1971	54.8		71.0	3.5	13.2		2.9450	2.9580	2.0	41.0
1972	60.0		75.2	2.8	24.2		2.9500	2.9520	2.0	36.8
1973	69.7		91.7	4.2	19.5		2.9960	3.0870	2.3	45.8
1974	85.1		103.4	1.9	22.3		3.1260	3.2700	2.7	46.4
1975	84.2		112.5	2.2	28.5		3.2890	3.3320	3.1	51.5
1976	93.0		123.1	2.5	26.4	28.4	3.3040	3.3450	2.7	32.0
1977	100.0		137.2	2.2	(0.3)		3.4430	3.5700	3.7	71.6
1978	143.6		146.3	2.8	29.8		3.5990	3.7240	4.3	51.6
1979	171.7		151.9	2.7	29.9		3.8690	3.9280	2.1	6.7
1980	136.1		165.0	2.5	(12.1)		4.3330	4.2770	2.7	52.9
1981	161.9		190.2	4.4	29.4		4.8340	5.0380	5.5	61.7
1982	198.0		195.7	4.4	26.4		5.5220	5.9770	6.3	43.7
1983	152.0		188.4	3.8	27.8		5.1070	5.0260	5.4	61.5
1984	126.7	1.8	186.8	2.3	21.6		5.1510	5.2820	8.9	109.4
1985	121.3	2.0	183.4	1.4	42.7		5.3420	4.9420	12.6	140.8
1986	118.8	2.1	182.5	2.3	67.7		4.9890	4.8360	14.0	151.0
1987	118.9	(1.8)	179.6	3.3	56.9		4.8620	4.5870	15.1	175.0
1988	123.6	(0.7)	187.3	3.3	61.3		4.6890	4.7030	17.0	198.4
1989	121.9	0.2	197.1	3.4	88.2		4.7092	4.6612	18.3	206.9
1990	135.7	0.3	193.8	3.8	79.9		4.6134	4.5708	18.6	207.2
1991	139.2	0.6	217.0	2.8	82.1		4.5373	4.4280	18.7	223.8

**Table 2. -- RRB-SSA Financial Interchange: Change in Balance of DI Trust Fund at End of Each Calendar Year 1957-2023, and on September 30, 2024 (Continued)**  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Benefit Payments <sup>2</sup>	Administrative Expenses	Military Service Adjustments	Transfers to SSEB Account <sup>3</sup>	Interest factor <sup>4</sup>		Second Semi-Annual %	Interest Creditable to SSEB Account <sup>5</sup>	Decrease in Trust Fund Balance at End of Year <sup>6</sup>
							First Semi-Annual %	Semi-Annual %			
1992	\$142.4	\$0.8	\$236.1	\$3.1		\$58.0	4.3697	4.3236	4.3236	\$21.8	\$283.6
1993	145.2	1.2	247.2	3.1		82.8	4.2213	4.1717	4.1717	24.9	329.6
1994	223.4	1.1	248.7	3.8		106.0	4.0431	3.9940	3.9940	23.8	275.4
1995	224.0	1.0	261.7	3.6	\$41.5	67.8	3.9499	3.3458	3.3458	18.6	225.0
1996	229.7	1.2	273.2	4.9		2.2	3.3242	3.4263	3.4263	17.3	287.3
1997	212.6	1.5	302.0	4.5		59.1	3.4160	3.4207	3.4207	21.1	341.7
1998	223.7	1.8	314.7	6.4		156.8	3.3774	3.2997	3.2997	20.7	301.2
1999	226.7	2.6	338.3	6.2		134.6	3.2486	3.2498	3.2498	18.8	300.6
2000	240.0	3.5	369.7	4.4	145.0	159.4	3.2600	3.2483	3.2483	16.2	143.0
2001	237.9	2.9	396.5	5.6		9.7	3.2049	3.1466	3.1466	14.2	308.8
2002	235.7	3.8	441.4	4.2		153.5	3.1153	3.0480	3.0480	20.4	381.8
2003	238.7	4.5	525.5	5.3		167.4	2.9995	2.8445	2.8445	25.4	527.4
2004	249.4	4.9	567.8	6.5		215.4	2.81695	2.27656	2.27656	29.5	661.5
2005	262.1	5.0	587.8	10.4		337.9	2.74551	2.67049	2.67049	35.0	689.7
2006	270.5	5.8	630.3	9.3		388.3	2.66276	2.64401	2.64401	35.0	699.7
2007	280.9	6.5	678.3	8.1		445.2	2.63361	2.60966	2.60966	34.5	688.0
2008	291.2	5.4	691.4	5.4		417.6	2.58896	2.52823	2.52823	34.1	704.7
2009	275.6	7.6	728.7	7.1		447.6	2.49370	2.46024	2.46024	34.0	743.7
2010	277.7	7.6	739.2	6.1		461.9	2.43922	2.41636	2.41636	35.3	777.1
2011	298.1	6.7	735.8	7.9		464.7	2.38023	2.36499	2.36499	35.3	786.6
2012	311.9	4.4	743.2	6.7	(74.5)	511.8	2.33058	2.29297	2.29297	34.5	817.4
2013	319.7	4.5	719.4	5.2		550.6	2.22808	2.20104	2.20104	31.9	699.1
2014	345.7	8.0	700.1	4.4		443.7	2.21984	2.24415	2.24415	28.3	634.5
2015	359.5	6.2	668.9	6.2		418.6	2.24793	2.25601	2.25601	25.3	550.6
2016	433.8	6.1	625.4	4.1	0.7	375.7	1.90364	1.69353	1.69353	16.0	379.8
2017	438.2	7.1	545.2	4.5		206.7	1.62237	1.51382	1.51382	10.2	287.7
2018	465.9	1.4	520.9	4.3		173.5	1.52155	1.57196	1.57196	6.7	178.8
2019	344.9	5.0	485.2	4.4		66.0	1.56278	1.51666	1.51666	6.7	259.2
2020	314.3	5.0	439.8	2.5	(5.3)	143.8	1.49658	1.41633	1.41633	7.1	250.8
2021	307.6	0.8	408.9	3.5		107.1	1.40992	1.33021	1.33021	6.9	254.6
2022	335.1	4.6	400.1	4.3		155.6	1.32383	1.31214	1.31214	5.5	169.2
2023	391.0	2.2	376.6	2.0		59.7	1.39528	1.48807	1.48807	3.6	98.5
2024 (9-month estimate)	300.2	0.6	271.9	1.5		73.7	1.57049	1.68963	1.68963	1.2	(1.4)

<sup>1</sup> Appropriations are net of payroll tax refunds for the calendar year.

<sup>2</sup> Uncollectible benefits overpayments are included in annual benefit payments.

<sup>3</sup> Figures in parentheses represent amounts creditable or transferred to trust fund.

<sup>4</sup> Represents rate derived from average interest rate earned by trust fund in indicated six month period. Interest factors applied to balance at beginning of period plus weighted net income in period.

<sup>5</sup> The Social Security Equivalent Benefit (SSEB) Account replaced the Railroad Retirement Account (RRA) as the Financial Interchange depository beginning in 1984.

<sup>6</sup> Figures in parentheses represent increases in trust fund balances at end of year.

NOTE - Detail may not add to totals shown because of rounding.

Table 3. -- RRB-CMS Financial Interchange: Change in Balance of HI Trust Fund at End of Each Calendar Year 1966-2023, and on September 30, 2024  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Administrative Expenses	Transfers to HI Trust Fund		Interest Factor <sup>2</sup>		Interest Creditable to HI Trust Fund <sup>3</sup>	Tax Refunds	Increase in Trust Fund Balance at End of Year
				HI Trust Fund	Semi-Annual %	First Semi-Annual %	Second Semi-Annual %			
Total	\$21,339.2	\$39.8	\$121.3	\$22,061.4			\$1,484.3	\$18.5		
1966	33.1		0.4	16.3		2.18	0.5		\$16.9	
1967	47.2		0.1	44.0		2.14	1.4	0.1	21.4	
1968	60.7		0.1	54.2		2.42	1.7	0.4	29.5	
1969	60.7		0.1	63.5		2.71	2.2	1.1	28.8	
1970	60.3		0.1	65.9		3.09	2.5	0.8	25.6	
1971	59.8		0.1	66.1		3.29	2.3	0.6	21.5	
1972	65.5		0.1	63.2		3.28	2.4	0.8	26.1	
1973	126.3		0.1	99.2		3.18	4.1	0.7	57.2	
1974	133.2		0.1	132.5		3.38	6.2	1.2	64.0	
1975	131.7		0.1	137.7		3.55	7.0	0.8	64.9	
1976	145.6		0.8	142.9		3.57	7.6	0.6	74.4	
1977	156.5		1.0	0.0		3.62	11.6	0.7	241.5	
1978	185.8		1.2	213.7		3.59	16.0	0.5	228.4	
1979	240.1		1.7	191.1		3.82	19.0	1.5	294.7	
1980	253.4		1.5	244.3		4.10	23.7	0.9	326.0	
1981	323.2		1.9	276.5		4.49	31.4	0.7	402.2	
1982	314.3		2.5	351.4		5.07	38.3	0.7	400.9	
1983	312.5		2.3	357.7		5.48	40.0	0.6	393.4	
1984	326.7		2.0	350.6		5.78	43.3	0.5	410.8	
1985	327.2		2.1	371.4		5.89	43.7	0.8	408.2	
1986	343.8		2.1	364.4		5.15	38.6	0.8	424.1	
1987	344.9		2.2	368.0		4.88	38.5	0.5	437.3	
1988	338.8		2.6	363.8		4.85	39.6	0.9	449.3	
1989	333.5		2.7	378.8		4.82	39.2	0.9	440.5	
1990	329.1		2.5	367.4		4.71	38.2	0.7	437.9	
1991	347.3		2.4	352.2		4.63	38.0	0.5	468.6	
1992	363.7		2.7	374.5		4.52	39.3		494.4	
1993	375.3		2.7	400.5		4.39	40.2		506.7	
1994*	362.6	0.0	2.7	412.9		4.26	38.5	0.2	492.2	
1995	367.8	0.2	2.4	396.1		4.22	38.2		499.9	

**Table 3. -- RRB-CMS Financial Interchange: Change in Balance of HI Trust Fund at End of Each Calendar Year 1966-2023, and on September 30, 2024 (Continued)**  
(Dollar amounts in millions)

Calendar Year	Appropriations (Payroll Taxes) <sup>1</sup>	Income Taxes	Administrative Expenses	Transfers to HI Trust Fund	Interest Factor <sup>2</sup>		Interest Creditable to HI Trust Fund <sup>3</sup>	ACA Adjustments	Increase in Trust Fund Balance at End of Year
					First Semt-Annual %	Second Semt-Annual %			
1996	\$375.1	\$0.0	\$3.2	\$401.3	4.09	4.06	\$37.9		\$508.4
1997	382.2	(0.1)	3.0	419.1	4.01	4.01	37.2		505.6
1998	411.7	0.0	3.0	419.4	3.98	3.92	37.9		532.8
1999	416.4	0.0	2.8	429.9	3.88	3.72	38.1		554.6
2000	407.4	0.0	2.1	465.3	3.68	3.62	36.4		531.0
2001	397.6	(0.2)	2.4	469.7	3.52	3.41	32.7		489.0
2002	393.3	(0.3)	2.2	424.7	3.34	3.23	29.6		484.7
2003	402.8	0.2	2.4	426.3	3.18	2.92	27.5		486.5
2004	423.8	0.3	2.6	418.6	2.95	2.92	27.2		516.6
2005	447.2	0.0	3.5	444.9	2.81	2.70	27.0		542.4
2006	469.0	(0.4)	3.4	471.5	2.70	2.65	27.7		563.8
2007	488.5	(0.2)	3.5	483.3	2.65	2.62	28.7		594.0
2008	519.6	(0.2)	3.3	525.7	2.59	2.51	28.8		613.2
2009	470.9	0.0	3.3	524.3	2.48	2.42	27.4		583.9
2010	472.0	0.0	3.9	535.1	2.40	2.38	24.6		541.5
2011	517.9	0.3	3.7	477.2	2.35	2.37	25.2		604.0
2012	566.2	0.6	3.5	510.9	2.29	2.29	27.8		684.2
2013	548.1	0.7	2.5	576.6	2.23	2.22	28.4		682.3
2014	608.0	1.0	2.5	611.6	2.19	2.18	28.2		705.4
2015	624.9	1.4	2.6	594.7	2.17	2.09	29.7	\$1.2	765.3
2016	571.3	1.9	2.9	656.8	2.03	1.88	27.1	1.4	707.3
2017	576.8	1.9	2.3	637.4	1.85	1.81	23.6	1.7	671.6
2018	603.4	1.8	2.2	596.5	1.82	1.78	23.3	1.8	703.2
2019	589.6	1.6	2.2	570.3	1.74	1.59	23.0	2.4	747.3
2020	525.1	2.3	1.8	606.4	1.44	0.93	16.6	1.8	684.9
2021	521.3	4.2	1.9	568.2	0.97	1.01	12.3	3.0	655.6
2022	570.3	6.4	2.3	515.9	1.08	1.31	15.3	3.3	732.7
2023	666.3	7.6	1.7	588.4	1.40	1.57	22.3	3.7	842.5
2024 (9 month estimate)	501.9	8.8	1.3	670.5	1.53	1.75	19.6		701.0

<sup>1</sup> Appropriations are net of payroll tax refunds for the calendar year.

<sup>2</sup> Represents rate derived from average interest earned by trust fund in indicated six month period. Interest factor applied to balance at beginning of period plus weighted net income in period.

<sup>3</sup> Figures adjusted to allow for interest on cash transfers to trust fund, at rates shown in table, from date of transfer to end of year.

<sup>4</sup> Tax refunds ceased after 1994.

NOTE - Detail may not add to totals shown because of rounding.

## **EXHIBIT 1 – BENEFIT, ADMINISTRATION COST, INCOME TAX, INTEREST CHARGES CALCULATIONS AND CORRESPONDENCE**

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### **Part I.** Summary of Benefit, Administrative Cost, Income Tax, and Interest Charges Calculations

#### **Benefit Calculations**

The benefit calculations for each determination include estimating, from one-percent sample data, the additional benefit amounts payable on the basis of railroad employment for the calendar year ending in the fiscal year covered by the determination. A preliminary estimate is also made of the benefit amounts for the last nine months of the fiscal year. In addition, adjustments in benefit calculations for prior years are made to reflect new information or to correct processing errors.

The railroad beneficiary universe for the calendar year, to which sample amounts are inflated, consists of all accounts on which a monthly benefit was in force (payable or withheld) under the Railroad Retirement Act (RRA) for at least one month of the year and on which a monthly benefit might have been payable under Social Security Administration (SSA) eligibility conditions. Also included are those on which an SSA lump sum based on death in the year would have been payable. The corresponding one-percent sample consists of cases carried over from earlier determinations and new cases in the universe with employee SSA account number ending in the digits "30."

The sample also includes cases with employee SSA number ending in "30" of non-retired employees full retirement age and over, employees (and their auxiliaries) eligible for RRA benefits but only paid benefits by SSA, and of widows ages 60 and over not on the RRB rolls (due to election of residual payment) where SSA benefits would have been payable in the year. The universe numbers for these railroad non-beneficiaries are assumed to be 100 times the sample numbers.

For each railroad employee beneficiary in the sample, a gross benefit amount was calculated on the basis of the employee's combined railroad and social security earnings record. Appropriate reductions for benefits payable on other earnings records and for earnings received during the year were then applied. Auxiliary benefits are either computed or estimated. Beginning with the 60<sup>th</sup> determination for calendar year 2010, auxiliary benefits are only computed when there is a spouse under full retirement age whose annuity is not reduced for early retirement. For all other cases, auxiliary benefits are estimated by applying factors based on SSA experience by gender (Tables 1 and 2) to the employee's benefit amounts. The gross amounts were reduced by the amounts of actual SSA payments, to obtain net additional amounts that would be paid on the basis of railroad employment. Separate OASI and DI amounts were developed for employee disability beneficiaries who were paid actual old-age benefits by SSA.

Separate OASI life and survivor amounts were developed in cases where the employee annuitant died during the year. For all survivor cases, the gross amount is computed based on the employee's combined earnings, with reduction when needed for beneficiary earnings in the year. Survivor gross amounts are reduced for actual SSA payments based on other earnings records (in most cases the beneficiary's) to obtain the net additional OASI amounts based on railroad service.

For employees who retired after 1956 and for non-retired employees who died after 1956, actual earnings under social security annual limits have been obtained from railroad employers. For cases on the rolls before 1957, however, annual benefits before reduction for SSA payments were increased by fixed ratios according to year of accrual. (Development of the ratios is described in the Financial Interchange Summary and Documentation for Fiscal Year 1957-58, pages 135-142.) The distribution of OASI and DI sample amounts by type of benefit is shown in Table 3.

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The sample and universe are stratified to improve the accuracy of the benefit estimates. The retirement beneficiary stratification is based on the employee's age in the determination year, the year their RRA annuity began and whether an RRA spouse annuity was payable. Monthly survivor beneficiary records are stratified on the basis of number of beneficiaries, type of benefit, beneficiary's age, and year of employee's death, or, if applicable, year retired employee had attained age 66. There is a single stratum for lump-sum death benefits and one for the railroad non-beneficiary group. Employee disability benefit strata are based entirely on employee's age. The composition of the 2023 strata is shown in Table 4.

Universe and sample counts were obtained for each stratum and the sample benefit payment amounts were tabulated by stratum (Tables 5 and 5a). These sample benefit payment amounts were then inflated by multiplying each stratum total by the ratio of the universe number to the sample number.

On an accrual basis, the uninflated additional OASI benefits for 2023 totaled \$84,613,309 and the inflated amount was \$8,435,946,957. The standard error of the OASI inflated amount was \$62,011,672 and the 95-percent confidence interval for the amount of OASI benefits was \$8,314,404,080 to \$8,557,489,833.

The uninflated amount of additional DI benefits accrued in 2023 was \$3,164,266. The inflated amount was \$370,795,948. The standard error of the DI inflated amount was \$12,600,246 and the 95-percent confidence interval for the amount of DI benefits was \$346,099,467 to \$395,492,430.

The preliminary estimates of additional benefit payments in January-September 2024 were made largely on the basis of the net sample amounts in current-payment status at the end of 2023. Allowances were made for lump-sum payments and the effect of family composition factors. The estimated cash amounts payable in the 9-month period were \$6,431.5 million in OASI and \$274.3 million in DI benefits. These figures will be superseded in the next determination by a calendar year 2024 estimate based on the one-percent sample.

Adjustments were made to the benefit calculations for years prior to 2023. These adjustments primarily involved the late receipt of data on benefit payments or earnings from RRB or SSA and the correction of processing errors. OASI adjustments increased benefits by \$9,091,000 for calendar years 2019-2022 and DI adjustments increased benefits by \$34,104,000 for calendar years 2017-2022.

The inflated adjustments and adjusted benefit amounts are shown by Trust Fund in Tables 6 and 6a.

The adjusted benefit payments for a year are the latest estimates of the amounts that would have been payable for that period on an accrual basis. Beginning with the 39<sup>th</sup> determination, second-degree curves are fit to annual accrued benefit amounts to estimate accrued benefit payments by month. The payments are then converted from an accrual to a cash basis by adding the estimated amount accrued in the preceding year but paid in the current year to the estimated amount both accrued and paid in the current year. These amounts are estimated from the number of lag months, i.e., the average length of time from date of accrual to payment, under SSA experience.

Beginning with the 46<sup>th</sup> determination (see Financial Interchange Summary and Documentation for Fiscal Year 1997, pages 42-46), the calculation of the float period reflects cycled benefit payments initiated by SSA. The float is the average number of days between the beginning of the month and the day on which Treasury clears funds for benefit payments. Effective June 1997, SSA began paying monthly benefits on staggered Wednesdays in the month (cycles 2 through 4) in addition to the third of the month (cycle 1). Almost all the SSA benefits paid in cycles 2 through 4 payments are to new beneficiaries, and the formula assumes all cycle 2 through 4 payments are by electronic funds transfer

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(EFT). The methodology to calculate a cycled float utilizes RRB experience on the percentage of annuitants receiving payments by EFT and SSA experience on the proportion of payments made in cycle 1 versus cycles 2 through 4. Table 7 displays the calculation of the float.

Beginning with the 53<sup>rd</sup> determination (see Financial Interchange Summary and Documentation for Fiscal Year 2004, pages 36-48), benefit overpayments written off as uncollectible are included in the calculations. Table 8 displays the calculation of the uncollectible overpayment amounts included in the benefit calculations for calendar years 1999-2023.

The Financial Interchange is liable under Public Law 88-133 for crediting SSA with benefits they have paid that are associated with pre-1957 military service covered under both the RRA and SSA. These benefits paid during 1952-1972, 1973-1974, 1975-1979, 1980-1991, 1992-1997, 1998-2005, and 2006-2018 were reimbursed in the 25<sup>th</sup>, 26<sup>th</sup>, 44<sup>th</sup>, 49<sup>th</sup>, 61<sup>st</sup>, 65<sup>th</sup>, and 69<sup>th</sup> determinations, respectively. A preliminary pre-1957 military service adjustment of \$41.9 million is included in the 73<sup>rd</sup> determination. Such adjustment will be reconciled in a future determination.

### **Administrative Costs Calculations**

The additional administrative expenses that would have been paid by the OASDHI Trust Funds with respect to coverage of railroad employment were estimated to total \$20.0 million for 2023 (Tables 9 and 9a). Expenses are based on unit cost factors supplied by SSA (see Correspondence) and workload estimates developed from the financial interchange one-percent sample of beneficiaries, the gross earnings one-percent sample of active railroad employees and actual RRB wage reports processing.

Beginning with the 38<sup>th</sup> determination, administrative expense calculations reflect an agreement on the treatment of dually entitled annuitants (discussed in the Financial Interchange Summary and Documentation for Fiscal Year 1986 (pages 76-95), Fiscal Year 1987 (pages 49-59) and Fiscal Year 1988 (pages 70-77)). The following discussion is a simplified explanation of how cases receiving SSA benefits are treated under the agreement.

The estimated net additional number of OASI cases for which there would have been a determination of insured status and computation of the primary insurance amount (PIA) is based on the financial interchange sample. It is 100 times the difference between (1) the number of new awards to employees and survivors where no previous FI or SSA award had been based on the account and (2) the number of accounts on the FI employee and survivor rolls on which SSA awarded benefits in the determination year.

Additional DI cases requiring determination of insured status and computation of PIA are based on the inflated number of disability freeze decisions reached in the determination year, less the number where SSA made the first freeze determination.

The number of additional cases that would have required adjudication of OASI auxiliary benefits was estimated from financial interchange sample data. It is the difference (inflated) between (1) the number of new OASI awards to spouses and children not receiving SSA benefits or to survivors who were not receiving life benefits in the month prior to the employee's death and (2) the number of aged widows (not on the RRA rolls), spouses, and children on the FI rolls who were awarded SSA benefits in the determination year.

The approximate increase in administrative costs due to the maintenance of benefit rolls is based on the number of benefits in the financial interchange sample. It is the average of the inflated number of

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financial interchange benefits (excluding those to individuals receiving SSA benefits) payable at the end of the determination year and at the end of the preceding determination year.

The number of compensation reports that would have been received by SSA from railroad employers was estimated from RRB experience during the year. Included are allowances for compensation adjustments and additional reports for employees with more than one railroad employer. The cost is apportioned between the OASI, DI, and HI Trust Funds. A portion of the costs for both OASI and DI awards is charged to the HI Trust Fund as it pays the hospital insurance benefits that are charged to these accounts. This portion of the OASI and DI costs is supplied by SSA in the form of unit cost factors. Table 9 shows the 2023 OASI and DI administrative cost calculations. The 2023 HI administrative cost calculation is shown in Table 9a.

Estimates of the OASDI and HI administrative expenses for 2022 were revised to reflect revisions to the workload estimates for disability enrollments. These results are shown in Tables 9b and 9c.

### **Income Tax Calculations**

At the beginning of each quarter, Treasury transfers the estimated increase in tax liability to the OASI and DI Trust Funds and the Social Security Equivalent Benefit Account for benefit payments to be received during such quarters. Proper adjustments to the transfers are made whenever the actual increase in tax liability is determined.

Income tax transfers in the financial interchange are calculated as a proportion of railroad retirement Tier 1 to social security equivalent benefit income taxes. Children of life annuitants are excluded from the calculations because it can be assumed that they would have negligible tax liability. All other non-RRB annuitants (primarily widow(er)s and spouses) are assumed to have proportionate tax liability.

Beginning with the 36<sup>th</sup> determination, income tax calculations reflect prior year income tax reconciliations. Financial interchange income tax adjustments are made in the year of the Treasury reconciliation.

The Omnibus Budget Reconciliation Act of 1993 legislation raised the level of taxes imposed on Social Security beneficiaries beginning in 1994. The increased tax revenues resulting from this legislation are payable to the HI Trust Fund. The manner of financial interchange tax liability calculations and Treasury payments to the HI Trust Fund are similar to that for OASDI. Beginning with the 43<sup>rd</sup> determination, annual adjustments are calculated to equate Treasury's quarterly and adjustment payments to what they would have been had they been calculated under the financial interchange methodology.

Table 10 shows the results of the OASDI calculations for calendar years 1984-2023 and January-September 2024. Table 10a shows the results of the HI calculations for calendar years 1994-2023 and January-September 2024.

### **Interest Charges Calculations**

Interest charges on income taxes, administrative expense, payroll taxes (including refunds), and benefits (including prior year amendments) accrue at interest rates earned by the OASI and DI Trust Funds on a semi-annual basis. The effective interest rates for the first and second halves of 2024 are 1.19956% and 1.24801% for the OASI Trust Fund, and 1.57049% and 1.68963% for the DI Trust Fund. The interest charges for the current determination reflect a cumulative interest accrual on \$9.1 million in OASI prior year benefit charges from 2019 through 2022 and \$34.1 million in DI prior year benefit credits from

2017 through 2022.

**Communications**

The Correspondence and Memoranda section in Part V contains letters and memoranda sent between the RRB and SSA and the RRB and CMS on financial interchange related matters.

**Part II.**

## Tables Pertaining to Benefit Calculations

**Table 1. -- Computation of Family Composition Factors and Factors for Child's Benefits for Calendar Year 2023  
Applied to Male Old-Age Employees**

Age Last Birthday of Old-Age Beneficiary	Social Security Data		
	(A)	(B)	(C)
	Child Factors	Family Composition Factors I	Family Composition Factors II
	$\frac{(1)-(7)+(3)-(9)}{(1)-(7)}$	$\frac{(5)+(6)}{(5)}$	$\frac{(2)-(5)+(3)+(10)-(6)}{(2)-(5)}$
62	1.0226	.....	.....
63	1.0240	.....	.....
64	1.0207	.....	.....
65	1.0173	1.0117	1.0157
66	1.0146	1.0145	1.0144
67	1.0136	1.0141	1.0141
68	1.0127	1.0159	1.0132
69	1.0118	1.0162	1.0124
70	1.0099	1.0131	1.0108
71	1.0096	1.0129	1.0103
72	1.0090	1.0121	1.0095
73	1.0086	1.0116	1.0089
74	1.0082	1.0115	1.0084
75	1.0079	1.0115	1.0079
76	1.0073	1.0116	1.0072
77	1.0072	1.0113	1.0069
78	1.0069	1.0125	1.0065
79	1.0066	1.0131	1.0061
80-84	1.0059	1.0157	1.0053
85 and over	1.0045	1.0161	1.0040

NOTE - Numbers in above column formulae correspond to the columns in Table 1a, which is supplied annually by SSA.

Column (A) - Factors to be applied to amounts of male old-age benefits in area of actual life benefits.

Column (B) - Factors to be applied to amounts of male old-age benefits in area of presumptive life benefits with a spouse on the rolls.

Column (C) - Factors to be applied to amounts of male old-age benefits in area of presumptive life benefits with no spouse on the rolls.

Table 1a — Selected benefit estimates relating to male old-age (primary) beneficiary families in current-payment status on 12/31/2023

Age	All old-age families			Beneficiary families consisting of a male old-age beneficiary with an aged wife receiving a full benefit whether or not children are present			Beneficiary families consisting of a male old-age beneficiary with a wife whose entitlement is based on having an eligible child in her care and is receiving a full benefit			
	(1) Old-age benefits	(2) Monthly rate of PIA	(3) Child benefits	(4) Old-age benefits	(5) Monthly rate of PIA	(6) Child benefits	(7) Old-age benefits	(8) Monthly rate of PIA	(9) Child benefits	(10) Wife benefits
62	\$408,702,326	\$578,550,362	\$9,959,240	\$931,999	\$1,321,031	\$8,543	\$1,286,739	\$1,824,496	\$754,409	\$579,836
63	624,012,635	869,725,539	16,136,610	1,755,049	2,449,946	37,237	2,093,439	2,932,894	1,213,975	938,247
64	815,319,278	1,099,045,890	18,233,512	2,685,687	3,624,220	51,287	2,482,597	3,379,860	1,378,282	1,108,026
65	1,141,426,553	1,446,939,673	21,392,195	4,841,632	6,047,410	70,607	3,122,647	4,048,791	1,654,591	1,334,800
66	1,991,695,068	2,292,668,348	31,212,204	12,150,363	13,574,039	196,328	4,656,189	5,556,226	2,270,598	1,854,065
67	3,031,992,088	3,303,341,758	44,067,262	28,138,337	29,481,497	414,263	6,738,348	7,517,359	3,066,976	2,502,858
68	3,158,445,154	3,393,999,160	42,703,261	38,765,132	39,720,186	630,347	6,095,646	6,647,577	2,699,337	2,223,506
69	3,143,970,366	3,336,738,579	39,458,096	49,932,975	49,989,163	810,005	5,543,287	5,966,251	2,442,830	1,994,369
70	3,415,654,403	3,469,024,183	36,008,333	79,156,142	74,937,781	983,251	4,984,075	5,206,200	2,138,891	1,749,392
71	3,345,001,239	3,407,252,466	33,781,995	99,105,265	93,238,132	1,206,458	4,353,690	4,512,621	1,829,260	1,529,151
72	3,119,569,687	3,201,447,622	29,428,883	103,829,814	97,485,932	1,178,797	3,250,263	3,375,142	1,360,801	1,156,540
73	2,851,284,080	2,946,674,535	25,689,630	104,284,292	96,878,199	1,127,766	2,667,244	2,760,616	1,135,176	931,309
74	2,772,188,786	2,892,385,000	23,825,329	113,855,217	104,292,363	1,199,429	2,554,062	2,640,565	1,090,743	895,672
75	2,685,413,747	2,833,911,897	22,017,879	111,783,721	102,832,856	1,185,270	1,878,195	1,952,046	799,995	657,699
76	2,661,932,675	2,836,392,714	20,198,318	107,460,555	99,793,075	1,152,748	1,668,159	1,732,719	727,423	587,225
77	2,311,830,421	2,482,556,334	17,057,208	89,954,369	84,483,191	932,329	1,213,300	1,269,965	527,446	432,095
78	1,783,672,955	1,924,688,277	12,666,438	63,539,078	60,326,151	752,151	831,454	862,583	362,549	288,002
79	1,684,252,644	1,830,906,615	11,382,168	54,070,555	52,085,650	683,307	601,872	637,365	254,878	222,308
80	1,647,726,615	1,799,132,835	10,324,508	48,410,395	47,128,548	641,028	579,666	622,505	251,199	213,473
81	1,499,851,612	1,647,907,657	9,258,817	39,014,602	38,672,619	592,922	433,118	452,987	183,080	157,777
82	1,246,570,899	1,372,039,947	7,379,773	30,184,841	30,169,604	478,381	335,007	365,191	155,703	123,613
83	1,071,827,176	1,179,535,385	6,099,582	24,256,647	24,538,915	439,804	242,275	261,476	107,416	88,288
84	914,196,611	1,004,553,419	5,078,455	19,210,962	19,508,683	353,353	163,896	177,658	71,889	60,546
85	818,589,147	898,261,604	4,244,241	16,473,531	16,786,774	336,580	98,853	105,137	42,916	36,531
86	685,304,467	748,632,481	3,334,815	13,707,937	13,975,519	253,022	78,509	85,091	36,962	29,243
87	554,762,845	605,741,894	2,589,065	10,488,184	10,716,548	180,781	63,570	67,709	28,257	23,650
88	466,058,859	508,343,956	2,066,963	8,817,836	9,016,511	146,959	39,932	42,877	16,905	13,766
89	383,688,444	415,848,651	1,676,390	8,146,149	8,215,605	139,416	26,066	28,189	11,475	10,986
90	307,174,665	330,237,024	1,274,300	7,121,064	7,030,436	107,097	14,084	15,731	5,945	5,945
91	263,893,917	282,409,119	1,072,541	6,700,204	6,464,943	87,900	16,725	18,200	6,871	6,350
92	208,455,082	220,988,822	830,158	5,517,604	5,210,324	60,049	2,343	2,375	688	688
93	165,355,786	174,776,356	633,032	4,195,331	3,909,269	42,995	12,570	12,896	4,829	4,829
94	119,456,885	125,610,095	427,089	2,877,645	2,665,459	21,530	1,731	1,834	1,098	366
95	89,220,039	94,177,629	343,672	2,114,873	1,979,716	27,741	4,256	4,210	1,356	1,357
96	64,885,991	68,187,237	231,856	1,288,661	1,205,091	4,026	4,311	4,758	1,952	1,952
97	42,678,865	44,925,212	128,352	745,725	707,528	8,132	0	0	0	0
98	28,866,504	30,234,444	95,536	494,931	464,134	5,428	0	0	0	0
99	17,891,318	18,729,335	68,694	305,758	288,782	3,337	0	0	0	0
100	11,146,016	11,579,348	35,512	136,104	132,574	2,966	1,481	1,424	595	595
101+	13,359,665	13,779,871	42,738	134,314	128,637	1,383	0	0	0	0
Total	51,562,325,510	55,741,881,269	512,454,656	1,316,583,478	1,261,477,036	16,574,952	58,139,638	65,093,523	26,637,294	21,765,052

**Table 2. -- Computation of Family Composition Factors and Factors for Child's Benefits for Calendar Year 2023  
Applied to Female Old-Age Employees**

Social Security Data			
	(A)	(B)	(C)
Age Last Birthday of Old-Age Beneficiary	Child Factors $\frac{(1)-(7)+(3)-(9)}{(1)-(7)}$	Family Composition Factors I $\frac{(5)+(6)}{(5)}$	Family Composition Factors II $\frac{(2)-(5)+(3)+(10)-(6)}{(2)-(5)}$
62	1.0049	.....	.....
63	1.0054	.....	.....
64	1.0049	.....	.....
65	1.0041	1.0084	1.0034
66	1.0037	1.0045	1.0034
67	1.0034	1.0050	1.0033
68	1.0034	1.0051	1.0033
69	1.0031	1.0041	1.0031
70	1.0027	1.0031	1.0028
71	1.0025	1.0041	1.0026
72	1.0023	1.0037	1.0024
73	1.0022	1.0033	1.0023
74	1.0020	1.0027	1.0021
75	1.0018	1.0036	1.0019
76	1.0016	1.0026	1.0017
77	1.0016	1.0023	1.0017
78	1.0014	1.0018	1.0015
79	1.0013	1.0024	1.0014
80-84	1.0010	1.0017	1.0012
85 and over	1.0005	1.0011	1.0007

NOTE - Numbers in above column formulae correspond to the columns in Table 2a, which is supplied annually by SSA.

Column (A) - Factors to be applied to amounts of female old-age benefits in area of actual life benefits.

Column (B) - Factors to be applied to amounts of female old-age benefits in area of presumptive life benefits with a spouse on the rolls.

Column (C) - Factors to be applied to amounts of female old-age benefits in area of presumptive life benefits with no spouse on the rolls.

**Table 2a — Selected benefit estimates relating to female old-age (primary) beneficiary families in current-payment status on 12/31/2023**

Age	All old-age families			Beneficiary families consisting of a female old-age beneficiary with an aged husband receiving a full benefit whether or not children are present			Beneficiary families consisting of a female old-age beneficiary with a husband whose entitlement is based on having an eligible child in his care and is receiving a full benefit			
	(1) Old-age benefits	(2) Monthly rate of PIA	(3) Child benefits	(4) Old-age benefits	(5) Monthly rate of PIA	(6) Child benefits	(7) Old-age benefits	(8) Monthly rate of PIA	(9) Child benefits	(10) Husband benefits
62	\$357,773,261	\$490,695,087	\$1,779,668	\$260,442	\$369,227	\$2,600	\$16,493	\$23,440	\$8,819	\$7,957
63	549,133,187	736,441,192	2,968,812	588,203	822,235	8,309	10,943	15,519	5,832	5,502
64	720,203,420	932,013,510	3,575,977	890,131	1,199,262	3,535	23,238	31,932	12,123	11,255
65	1,029,459,415	1,243,974,161	4,279,670	1,582,354	2,000,937	16,892	36,435	46,795	17,558	17,085
66	1,678,994,372	1,851,530,792	6,215,033	3,021,114	3,459,855	15,511	30,562	37,598	14,858	13,393
67	2,460,618,639	2,568,190,464	8,371,099	5,572,625	6,021,741	30,108	35,284	39,557	14,485	14,453
68	2,562,085,874	2,629,128,794	8,646,759	6,912,659	7,315,656	37,595	36,064	39,674	13,933	15,877
69	2,560,461,121	2,575,561,538	7,976,528	7,782,886	8,066,820	33,008	15,703	16,426	6,136	6,134
70	2,719,445,536	2,614,094,067	7,243,909	8,980,032	8,941,685	27,800	16,491	17,740	7,202	6,613
71	2,682,547,554	2,573,446,574	6,630,965	8,550,318	8,449,052	34,995	15,159	15,882	5,926	5,416
72	2,525,201,156	2,417,462,414	5,844,534	7,606,601	7,493,616	27,935	5,943	6,515	2,986	1,752
73	2,326,276,969	2,218,113,329	5,080,588	6,892,186	6,792,403	22,471	6,742	7,549	2,436	3,259
74	2,278,295,190	2,174,203,446	4,512,005	6,467,047	6,297,016	16,846	3,914	4,334	1,368	1,893
75	2,209,271,577	2,112,321,801	4,012,247	5,921,719	5,821,129	20,963	0	0	0	0
76	2,189,072,152	2,067,628,701	3,556,627	5,032,416	5,004,919	13,234	2,519	2,907	1,090	1,091
77	1,902,817,391	1,791,671,780	3,025,107	4,129,170	4,112,903	9,341	2,443	2,783	1,044	1,044
78	1,483,112,278	1,371,986,179	2,101,003	2,936,729	2,964,611	5,250	0	0	0	0
79	1,424,087,190	1,301,792,350	1,813,428	2,654,003	2,660,912	6,436	0	0	0	0
80	1,407,533,454	1,272,281,853	1,586,510	2,129,805	2,173,906	2,092	0	0	0	0
81	1,292,423,729	1,154,683,156	1,405,843	1,933,384	1,983,933	3,831	0	0	0	0
82	1,094,035,888	969,643,796	1,171,677	1,441,533	1,474,527	3,687	0	0	0	0
83	957,408,676	836,544,802	848,169	1,114,590	1,130,767	2,276	0	0	0	0
84	841,708,375	718,943,131	705,011	1,016,308	1,029,464	1,721	0	0	0	0
85	768,829,916	644,548,574	584,433	740,080	755,479	1,369	0	0	0	0
86	663,050,555	542,047,057	507,551	558,807	563,829	310	0	0	0	0
87	566,528,229	446,957,226	348,487	375,363	375,939	827	0	0	0	0
88	496,704,516	380,715,729	256,098	276,795	269,740	0	0	0	0	0
89	425,059,672	318,800,874	188,545	201,405	200,585	0	0	0	0	0
90	351,081,320	259,824,001	142,093	145,240	138,826	0	0	0	0	0
91	313,208,311	230,756,502	104,504	103,387	97,990	245	0	0	0	0
92	260,198,350	184,920,060	91,857	84,181	80,421	0	0	0	0	0
93	216,780,275	150,619,705	67,950	53,876	51,669	167	0	0	0	0
94	171,992,613	117,163,708	49,028	34,896	34,336	0	0	0	0	0
95	138,396,667	95,012,840	36,767	17,087	16,049	0	0	0	0	0
96	108,084,095	74,148,995	25,259	15,581	13,518	0	0	0	0	0
97	78,250,298	53,001,597	16,173	2,290	2,386	0	0	0	0	0
98	56,980,760	39,045,857	15,207	3,554	3,676	0	0	0	0	0
99	39,255,934	26,518,289	8,265	1,628	761	0	0	0	0	0
100	25,467,846	17,009,467	9,271	2,685	2,496	0	0	0	0	0
101+	41,478,027	27,559,533	9,830	0	0	0	0	0	0	0
Total	43,973,313,788	42,231,002,930	95,812,484	96,033,105	98,194,275	349,354	257,933	308,651	115,796	112,724

**Table 3. -- Analysis of Net Benefit Amounts (Uninflated) for 2023, By Type of Benefit (Accrual Basis)**  
(in thousands)

Type of Benefit	Total			OASI			DI		
	Net Chargeable	Combined <sup>1</sup> Earnings	Actual SSA Offsets	Net Chargeable	Combined <sup>1</sup> Earnings	Actual SSA Offsets	Net Chargeable	Combined Earnings	Actual SSA Offsets
Total	\$87,778	\$96,767	\$8,989	\$84,613	\$93,394	\$8,781	\$3,164	\$3,373	\$208
Retired Employees, Total	58,942	63,026	4,084	55,947	59,822	3,876	2,995	3,204	208
Full Rate	17,279	19,464	2,185	14,283	16,260	1,977	2,995	3,204	208
Reduced Rate	41,663	43,562	1,899	41,663	43,562	1,899	-	-	-
Non-Retired Employees, Total	89	329	240	89	329	240	-	-	-
Presumptives <sup>2</sup>	-	-	-	-	-	-	-	-	-
Regular <sup>3</sup>	89	329	240	89	329	240	-	-	-
Auxiliaries of Retired Employees, Total	12,218	12,279	62	12,049	12,110	62	169	169	-
Spouses, Full Rate, Full Retirement Age and Over	797	810	13	776	790	13	21	21	-
Spouses, Reduced Rate	11,197	11,227	30	11,129	11,159	30	68	68	-
Spouses, Full Rate, Under Full Retirement Age	94	103	9	86	95	9	8	8	-
Children <sup>4</sup>	130	140	10	57	67	10	73	73	-
Auxiliaries of Non-Retired Employees, Total	1	1	-	1	1	-	-	-	-
Survivors, Total	16,528	21,131	4,603	16,528	21,131	4,603	-	-	-
Aged Widow(er)s, Full Rate	3,064	4,134	1,070	3,064	4,134	1,070	-	-	-
Aged Widow(er)s, Reduced Rate	11,883	15,182	3,298	11,883	15,182	3,298	-	-	-
Disabled Widow(er)s	464	596	132	464	596	132	-	-	-
Widowed Mothers/Fathers	125	125	-	125	125	-	-	-	-
Children and Parents	977	1,064	87	977	1,064	87	-	-	-
Widow(er)s Not on RRB Rolls	1	18	17	1	18	17	-	-	-
Lump Sum	13	13	-	13	13	-	-	-	-

<sup>1</sup> Includes amounts due to child and family composition factors.

<sup>2</sup> Benefits for period between earliest retroactivity of application and date of first payment by RRB or SSA.

<sup>3</sup> Benefits paid by SSA, but not RRB.

<sup>4</sup> Actual SSA offsets under OASI were below \$500, and thus were rounded down to \$0.

NOTE: For retired employees and auxiliaries, combined earnings are a tier reduction for receipt of SSA benefits based on other than retired employee's earnings. SSA offsets for retired employees and auxiliaries include only payments based on retired employee's earnings. For survivors, SSA offsets are payments based on other than the employee's earnings. Detail may not add to totals shown because of rounding.

Table 4. -- Stratification of Universe of RRB Beneficiaries, Calendar Year 2023

Stratum Number	Type of RRA Benefit Payable	Age of Beneficiary on Birthday in 2023	RRA Spouse Annuity Payable in 2023	Criterion Year <sup>1</sup>	Number in Survivor Family
<u>OLD-AGE AND SURVIVORS INSURANCE TRUST FUND<sup>2</sup></u>					
1	Employee	62-65	---	Before 2024	-
2	Employee	66 or older	Yes	Before 1992	-
3	Employee	66 or older	Yes	1992-1997	-
4	Employee	66 or older	Yes	1998-2003	-
5	Employee	66 or older	Yes	2004-2011	-
6	Employee	66 or older	Yes	2012-2023	-
7	Employee	66 or older	No	Before 1992	-
8	Employee	66 or older	No	1992-1997	-
9	Employee	66 or older	No	1998-2003	-
10	Employee	66 or older	No	2004-2011	-
11	Employee	66 or older	No	2012-2023	-
12	Aged Widow(er)	60-61	---	Before 2024	1
13	Aged Widow(er), Parent	62 or older	---	Before 1979	1
14	Aged Widow(er), Parent	62 or older	---	1979-1986	1
15	Aged Widow(er), Parent	62 or older	---	1987-1996	1
16	Aged Widow(er), Parent	62 or older	---	1997-2001	1
17	Aged Widow(er), Parent	62 or older	---	2002-2006	1
18	Aged Widow(er), Parent	62 or older	---	2007-2011	1
19	Aged Widow(er), Parent	62 or older	---	2012-2023	1
20	Child	---	---	Before 2024	1
21	Disabled Widow(er)	---	---	Before 2024	1
22	Monthly Survivor	---	---	Before 2024	2 or more
23	Monthly Survivor, Lump Sum <sup>3</sup>	---	---	2023	-
24	None <sup>4</sup>	---	---	---	-
<u>DISABILITY INSURANCE TRUST FUND</u>					
1	Employee Disability	64-FRA <sup>5</sup>	---	---	-
2	Employee Disability	60-63	---	---	-
3	Employee Disability	55-59	---	---	-
4	Employee Disability	Under 55	---	---	-

<sup>1</sup> For employee benefits, employee annuity accrual year; for monthly survivor benefits, year employee attained age 66, where employee had retired and died at age 66 or older; in all other cases year of employee death.

<sup>2</sup> Excludes all interim widow(er) benefits, survivor-option annuities, and other survivor benefits based on deaths before April 1938.

<sup>3</sup> Employee death in the determination year, 2023, without regard to employee's age or annuity accrual date.

<sup>4</sup> Non-retired employees at full retirement age and older, employees (and their auxiliaries) with 10 or more years of railroad service (or 5 or more years of railroad service after 1995) paid benefits by SSA but not RRB, and widow(er)s age 60 and older who are not on the rolls.

<sup>5</sup> Full retirement age gradually increases from age 65 to age 67, for those born between 1937 and 1960. It is age 67 for those born after 1959 and age 65 for those born before 1938.

**Table 5. -- Basic Data Used to Compute Inflated Amount of OASI Benefits and Sampling Error, 2023**

Stratum Number <sup>1</sup> <i>i</i>	Universe Number <i>N<sub>i</sub></i>	Sample Number <i>n<sub>i</sub></i>	Sum of Net Benefit Amounts $\sum_{j=1}^{n_i} X_{ij}$	Sum of Squares of Net Benefit Amounts $\sum_{j=1}^{n_i} X_{ij}^2$
Total <sup>2</sup>	337,264	3,373	\$84,613,309	\$2,753,700,885,588
1	15,851	153	3,904,569	121,657,114,447
2	3,846	33	782,673	21,021,265,981
3	9,793	95	2,486,331	74,018,352,646
4	21,738	225	7,126,258	255,698,346,614
5	48,342	510	17,149,659	652,081,205,039
6	51,466	518	18,899,690	768,471,546,847
7	5,681	57	978,483	19,697,989,251
8	9,423	101	1,901,793	42,349,557,051
9	13,731	131	2,831,886	71,419,099,708
10	23,287	225	5,082,253	134,633,398,666
11	30,204	299	6,851,526	185,738,593,435
12	631	7	105,751	2,032,580,185
13	1,904	16	125,821	1,723,553,525
14	5,161	55	790,748	15,342,589,684
15	22,290	229	3,320,602	66,828,464,124
16	14,038	138	1,981,156	42,909,947,144
17	13,146	138	2,428,467	57,337,068,263
18	12,628	118	2,129,357	54,100,874,217
19	14,878	149	3,220,370	88,005,290,426
20	4,399	36	445,436	7,357,421,570
21	3,106	33	479,644	9,210,719,514
22	5,310	42	1,486,352	60,665,136,216
23	5,011	51	13,005	-- <sup>3</sup>
24	1,400	14	91,479	1,400,771,035

<sup>1</sup> For description of strata, see Table 4.

<sup>2</sup> Universe and sample numbers exclude 1,988 and 25 retirement annuities, respectively, from a group that consists almost entirely of non-disabled annuitants under age 62.

NOTE: The inflated amount (not shown in the table),  $A$ , of the benefits and the sample error,  $S_a$ , of the inflated amount are computed from the following formulas:

$$A = \sum_{i=1}^{24} \frac{N_i}{n_i} * \sum_{j=1}^{n_i} x_{ij}$$

$$S_a^2 = \sum_{i=1}^{24} \frac{N_i(N_i - n_i)}{n_i^2(n_i - 1)} \left[ n_i \sum_{j=1}^{n_i} x_{ij}^2 - \left( \sum_{j=1}^{n_i} x_{ij} \right)^2 \right]$$

where  $x_{ij}$  is the benefit amount for the  $j$ th individual in the  $i$ th stratum and the remaining symbols are defined by the table caption headings. Detail may not add to totals shown because of rounding.

<sup>3</sup> The lumpsum benefit amount is a constant. Therefore, this amount is not computed as it is not used in the sample error.

**Table 5a. -- Basic Data Used to Compute Inflated Amount of DI Benefits and Sampling Error, 2023**

Stratum Number <sup>1</sup>	Universe Number	Sample Number	Sum of Net Benefit Amounts $\sum_{j=1}^{n_i} X_{ij}$	Sum of Squares of Net Benefit Amounts $\sum_{j=1}^{n_i} X_{ij}^2$
<i>i</i>	$N_i$	$n_i$		
Total <sup>2</sup>	12,794	109	\$3,164,266	\$103,262,038,598
1	4,754	39	1,072,097	34,860,577,579
2	3,268	29	845,930	26,399,883,528
3	2,359	19	559,044	17,473,117,398
4	2,413	22	687,195	24,528,460,093

<sup>1</sup> For description of strata, see Table 4.

<sup>2</sup> Universe and sample exclude 5,913 and 67 disability annuities, respectively, composed largely of annuitants denied a disability freeze. Of these, 2,707 and 30, respectively, were annuitants ages 62 to 66 who were included in the OASI strata.

NOTE: The inflated amount,  $A$ , of the benefits and the sample error,  $s_a$ , of the inflated amount are computed from the following formulas:

$$A = \sum_{i=1}^4 \frac{N_i}{n_i} * \sum_{j=1}^{n_i} x_{ij}$$

$$s_a^2 = \sum_{i=1}^4 \frac{N_i(N_i - n_i)}{n_i^2(n_i - 1)} \left[ n_i \sum_{j=1}^{n_i} x_{ij}^2 - \left( \sum_{j=1}^{n_i} x_{ij} \right)^2 \right]$$

where  $x_{ij}$  is the benefit amount for the  $j$ th individual in the  $i$ th stratum and the remaining symbols are defined by the table caption headings. Detail may not add to totals shown because of rounding.

Table 6. -- OASI Benefit Payments, 1937-2023, Including Adjustments, on an Accrual Basis

Year	Benefit Payments		
	Before Adjustments (Accrual Basis)	Adjustments <sup>1</sup>	Adjusted Benefit Payments
Total	\$251,545,068,535	\$9,090,682	\$252,941,794,594
1937-1970 <sup>2</sup>	11,739,327,167	---	11,739,327,167
1971	1,128,570,194	---	1,128,570,194
1972	1,210,965,811	---	1,210,965,811
1973	1,471,457,246	---	1,471,457,246
1974	1,590,141,425	---	1,590,141,425
1975	1,724,239,005	---	1,724,239,005
1976	1,845,392,953	---	1,845,392,953
1977	1,955,837,142	---	1,955,837,142
1978	2,079,934,396	---	2,079,934,396
1979	2,281,435,049	---	2,281,435,049
1980	2,552,252,439	---	2,552,252,439
1981	2,892,694,764	---	2,892,694,764
1982	3,187,533,843	---	3,187,533,843
1983	3,257,653,071	---	3,257,653,071
1984	3,383,732,525	---	3,383,732,525
1985	3,515,602,903	---	3,515,602,903
1986	3,623,833,354	---	3,623,833,354
1987	3,700,591,036	---	3,700,591,036
1988	3,843,574,962	---	3,843,574,962
1989	4,009,931,952	---	4,009,931,952
1990	4,199,908,201	---	4,199,908,201
1991	4,402,929,123	---	4,402,929,123
1992	4,531,315,765	---	4,531,315,765
1993	4,653,171,768	---	4,653,171,768
1994	4,694,292,958	---	4,694,292,958
1995	4,726,567,302	---	4,726,567,302
1996	4,764,123,499	---	4,764,123,499
1997	4,816,342,931	---	4,816,342,931
1998	4,822,083,266	---	4,822,083,266
1999	4,796,326,324	---	4,796,326,324
2000	4,819,460,800	---	4,819,460,800
2001	4,850,024,182	---	4,850,024,182
2002	4,855,336,824	---	4,855,336,824
2003	4,884,879,826	---	4,884,879,826
2004	4,860,655,159	---	4,860,655,159
2005	4,937,162,494	---	4,937,162,494
2006	5,084,038,021	---	5,084,038,021
2007	5,203,855,693	---	5,203,855,693
2008	5,313,593,746	---	5,313,593,746
2009	5,649,984,309	---	5,649,984,309
2010	5,683,931,895	---	5,683,931,895
2011	5,785,200,535	---	5,785,200,535
2012	6,058,097,316	---	6,058,097,316
2013	6,204,802,935	---	6,204,802,935
2014	6,374,686,022	---	6,374,686,022
2015	6,541,903,407	---	6,541,903,407
2016	6,626,232,750	---	6,626,232,750
2017	6,730,706,992	---	6,730,706,992
2018	6,941,094,011	---	6,941,094,011
2019	7,134,834,665	(504,400)	7,134,330,265
2020	7,307,511,759	(1,540,996)	7,305,970,763
2021	7,427,854,574	2,140,701	7,429,995,275
2022	8,435,946,957	8,995,377	7,828,142,043
2023	6,431,511,289	---	8,435,946,957

<sup>1</sup> Includes revision of work deduction amounts and adjustments based on information received subsequent to the previous determination.

<sup>2</sup> Data for years 1937-1970 are not shown separately as they are not adjusted in this determination.

**Table 6a. -- DI Benefit Payments, 1957-2023, Including Adjustments, on an Accrual Basis**

Year	Benefit Payments		
	Before Adjustments (Accrual Basis)	Adjustments <sup>1</sup>	Adjusted Benefit Payments
Total	\$19,664,040,026	\$34,103,824	\$19,811,827,423
1957-1988 <sup>2</sup>	3,259,212,386	---	3,259,212,386
1989	197,808,413	---	197,808,413
1990	193,549,099	---	193,549,099
1991	220,959,582	---	220,959,582
1992	236,428,705	---	236,428,705
1993	248,711,444	---	248,711,444
1994	248,241,221	---	248,241,221
1995	264,253,680	---	264,253,680
1996	273,960,615	---	273,960,615
1997	305,988,787	---	305,988,787
1998	314,356,909	---	314,356,909
1999	341,730,308	---	341,730,308
2000	371,011,014	---	371,011,014
2001	398,667,514	---	398,667,514
2002	446,908,210	---	446,908,210
2003	534,251,811	---	534,251,811
2004	566,765,951	---	566,765,951
2005	591,239,641	---	591,239,641
2006	633,338,928	---	633,338,928
2007	681,521,390	---	681,521,390
2008	691,173,185	---	691,173,185
2009	730,077,531	---	730,077,531
2010	738,159,883	---	738,159,883
2011	736,004,195	---	736,004,195
2012	741,137,800	---	741,137,800
2013	715,777,195	---	715,777,195
2014	697,701,579	---	697,701,579
2015	662,590,680	---	662,590,680
2016	620,485,380	---	620,485,380
2017	534,230,877	1,669,650	535,900,527
2018	519,756,396	2,668,047	522,424,443
2019	472,542,591	4,149,363	476,691,954
2020	431,250,969	6,358,159	437,609,128
2021	399,166,090	7,088,477	406,254,567
2022	370,795,948	12,170,128	400,137,819
2023	274,284,118	---	370,795,948

<sup>1</sup> Includes revision of work deduction amounts and adjustments based on information received subsequent to the previous determination.

<sup>2</sup> Data for years 1957-1988 are not shown separately as they are not adjusted in this determination.

Table 7. – Summary of Float Days For Financial Interchange, 1997-2024

Year	Cycle 1-4 Payments																		
	First Half						Second Half												
	RRB PCT		Percentage		Cycle 1		Cycles 2-4		RRB EFT		Percentage		Cycle 1		Cycles 2-4		Combined		
	PCT	OASI	DI	OASI	EFT	PCT	Float	DI	DI	PCT	OASI	DI	OASI	EFT	PCT	Float	DI	OASI	DI
1997	63.60%	100.00%	100.00%	63.60%	63.60%	2.8333	7.6333	4.5805	4.5805	66.30%	99.29%	99.47%	66.06%	66.12%	2.6667	8.1000	17.4339	4.6025	4.5760
1998	68.90%	97.38%	97.31%	68.06%	68.04%	2.5000	7.8333	4.5718	4.5828	71.50%	95.35%	94.39%	70.11%	69.81%	2.6667	8.1333	17.4339	4.9114	5.0531
1999	74.20%	93.34%	91.37%	72.36%	71.76%	2.3333	7.7667	4.8067	5.1246	75.20%	91.14%	88.11%	72.79%	71.85%	2.5000	8.3000	17.7673	5.2904	5.7536
2000	76.20%	88.87%	85.00%	73.22%	72.00%	2.8333	7.7667	5.6883	6.2728	77.00%	85.57%	82.20%	73.12%	72.02%	2.3333	8.1000	18.1006	5.9350	6.4663
2001	77.70%	83.21%	79.38%	73.20%	71.91%	2.3333	7.8000	6.3404	6.9760	78.80%	81.06%	76.97%	73.85%	72.46%	2.3333	8.1000	18.2673	6.5735	7.2252
2002	80.90%	78.82%	74.33%	75.77%	74.30%	2.3333	7.6000	6.6432	7.3440	81.70%	76.64%	72.06%	76.12%	74.60%	2.5000	8.0000	18.3768	7.2153	7.9428
2003	82.20%	74.55%	70.21%	76.12%	74.65%	2.8333	7.6333	7.5731	8.2365	82.90%	72.43%	68.26%	76.39%	74.95%	2.6667	8.1000	17.4339	7.6666	8.2822
2004	83.60%	70.28%	66.68%	76.67%	75.41%	2.6667	7.8000	8.2932	8.8730	84.10%	68.29%	65.52%	76.72%	75.73%	2.5000	8.3000	17.7673	8.2635	8.6864
2005	84.80%	66.05%	64.35%	76.99%	76.38%	2.6667	7.8000	8.4597	8.7120	85.30%	64.13%	63.29%	77.08%	76.77%	2.3333	7.9333	19.1006	9.1709	9.3114
2006	85.90%	62.05%	62.39%	77.28%	77.40%	2.8333	7.9667	9.1610	9.1114	86.40%	60.27%	62.11%	77.43%	78.10%	2.3333	8.1000	18.1006	9.3820	9.0922
2007	87.00%	58.30%	61.26%	77.70%	78.78%	2.3333	7.8000	9.9660	9.4751	87.50%	56.61%	61.31%	77.92%	79.61%	2.3333	8.1000	18.2673	9.9672	9.2190
2008	87.90%	54.72%	60.44%	77.89%	79.98%	2.5000	7.6333	10.3358	9.4242	88.40%	52.90%	59.97%	78.07%	80.66%	2.6667	8.1000	17.4339	10.2529	9.2087
2009	89.00%	51.00%	59.58%	78.43%	81.54%	2.5000	7.8333	10.8124	9.4597	89.60%	49.05%	59.05%	78.80%	82.39%	2.6667	8.1333	17.5459	10.8169	9.3290
2010	90.10%	47.24%	58.37%	79.04%	83.04%	2.3333	7.7667	11.3665	9.5746	90.60%	45.47%	57.17%	79.33%	83.56%	2.5000	8.3000	17.7673	11.3703	9.5838
2011	91.30%	43.85%	56.85%	80.16%	84.70%	2.6667	7.8000	11.4052	9.4851	93.00%	42.36%	56.61%	83.47%	87.64%	2.3333	7.9333	19.1006	12.3904	10.0003
2012	94.70%	40.85%	56.41%	87.02%	90.60%	2.5000	7.8333	12.0112	9.5834	96.00%	39.44%	56.30%	89.86%	92.90%	2.3333	8.1000	18.2673	12.2142	9.5266
2013	98.00%	37.93%	56.36%	94.73%	96.45%	2.3333	7.6000	12.1215	9.2469	98.90%	36.60%	56.43%	96.99%	98.05%	2.5000	8.0000	18.3768	12.6268	9.4773
2014	99.00%	35.33%	56.54%	97.17%	98.23%	2.8333	7.6333	12.7545	9.5168	99.10%	34.15%	56.70%	97.36%	98.41%	2.6667	8.1000	17.4339	12.4395	9.1098
2015	99.20%	32.97%	56.79%	97.57%	98.59%	2.5000	7.8333	13.1118	9.3554	99.20%	31.86%	56.90%	97.49%	98.59%	2.6667	8.1333	17.5459	12.8489	9.1235
2016	99.20%	30.82%	56.94%	97.40%	98.59%	2.1667	7.8000	13.0042	8.9298	99.20%	29.86%	56.97%	97.32%	98.60%	2.3333	7.9333	19.1006	14.1393	9.5925
2017	99.20%	28.84%	57.06%	97.23%	98.60%	2.8333	7.9667	13.3834	9.2158	99.20%	27.93%	57.10%	97.14%	98.60%	2.3333	8.1000	18.1006	13.7424	9.1436
2018	99.30%	26.97%	57.25%	97.40%	98.78%	2.3333	7.8000	14.4947	9.4690	99.30%	26.14%	57.25%	97.32%	98.78%	2.3333	8.4667	18.2673	14.1454	9.1887
2019	99.30%	25.28%	57.21%	97.23%	98.78%	2.3333	7.6000	14.0267	9.0464	99.30%	24.52%	57.11%	97.15%	98.77%	2.5000	8.0000	18.3196	14.4790	9.3239
2020	99.30%	23.77%	57.19%	97.05%	98.78%	2.6667	7.8000	13.9602	9.0248	99.30%	23.03%	57.41%	96.96%	98.78%	2.6667	8.1333	17.5459	14.1577	9.0417
2021	99.40%	22.27%	57.38%	97.31%	98.95%	2.3333	7.7667	14.8811	9.2280	99.40%	21.67%	57.41%	97.23%	98.95%	2.5000	8.3000	17.7673	14.4940	9.0372
2022	99.40%	21.07%	57.57%	97.15%	98.96%	2.6667	7.8000	14.3339	8.9627	99.40%	20.56%	57.67%	97.08%	98.96%	2.3333	7.9333	19.1006	15.6870	9.4649
2023	99.40%	20.07%	58.04%	97.01%	98.97%	2.8333	7.9667	14.6671	9.0610	99.40%	19.66%	58.05%	96.95%	98.97%	2.3333	8.1000	18.1006	15.0359	8.9819
2024	99.50%	19.24%	58.19%	97.40%	99.14%	2.5000	7.7667	15.2165	9.0954	99.50%	18.93%	58.16%	97.36%	99.14%	2.5000	8.0000	18.3196	15.3531	9.1472

**Table 8. -- Summary of Uncollectible Benefit Overpayment Calculations**

Year	SSA Equivalent	Sample	Overpayment	DI	Amount Charged		Ratio of Overpayments to FI Benefits <sup>3</sup>
	Uncollectible Overpayments	SSEB Percentage <sup>1</sup>	Amount Charged	Trust Fund Proportion <sup>2</sup>	By Trust Fund		
					OASI	DI	
1999	\$3,503,422	66.21%	\$2,319,615	0.54304	\$1,059,963	\$1,259,652	0.0452%
2000	2,781,767	66.21%	1,841,808	0.57745	778,261	1,063,548	0.0355%
2001	1,770,787	66.21%	1,172,438	0.58242	489,584	682,854	0.0223%
2002	1,867,458	66.21%	1,236,444	0.61244	479,196	757,248	0.0233%
2003	1,867,671	66.21%	1,236,585	0.64262	441,937	794,649	0.0229%
2004	3,292,057	69.08%	2,274,153	0.64758	801,451	1,472,702	0.0419%
2005	2,304,781	69.08%	1,592,143	0.65361	551,506	1,040,637	0.0289%
2006	2,373,485	69.08%	1,639,603	0.68173	521,833	1,117,770	0.0287%
2007	2,262,935	69.08%	1,563,235	0.68981	484,892	1,078,343	0.0266%
2008	3,612,941	69.08%	2,495,820	0.64597	883,601	1,612,219	0.0417%
2009	2,979,389	60.85%	1,812,958	0.61612	695,967	1,116,992	0.0285%
2010	3,205,170	60.85%	1,950,346	0.62474	731,889	1,218,456	0.0304%
2011	2,246,004	60.85%	1,366,693	0.62422	513,580	853,113	0.0210%
2012	1,826,605	60.85%	1,111,489	0.63410	406,689	704,800	0.0164%
2013	1,503,658	60.85%	914,976	0.61167	355,312	559,664	0.0132%
2014	2,162,281	62.78%	1,357,480	0.59302	552,471	805,009	0.0192%
2015	2,633,041	62.78%	1,653,023	0.53866	762,598	890,426	0.0229%
2016	1,225,186	62.78%	769,172	0.48886	393,156	376,016	0.0106%
2017	924,273	62.78%	580,259	0.45905	313,890	266,369	0.0080%
2018	817,161	62.78%	513,013	0.41471	300,260	212,754	0.0069%
2019	804,726	65.26%	525,164	0.48900	268,361	256,803	0.0069%
2020	692,212	65.26%	451,738	0.68088	144,160	307,578	0.0058%
2021	240,104	65.26%	156,692	0.64618	55,441	101,251	0.0020%
2022	427,242	65.26%	278,818	0.63501	101,766	177,052	0.0034%
2023	1,138,824	65.26%	743,197	0.61033	289,603	453,594	0.0085%

<sup>1</sup> Percentage of SSA equivalent uncollectible overpayments attributable to the SSEB portion of the Tier 1 benefit. Percentages are recalculated every 5 years based on a sample of railroad annuity overpayments written off as uncollectible in the first year of the 5 year grouping.

<sup>2</sup> OASI/DI allocation is based on overall SSA OASI/DI overpayment experience for the calendar year.

<sup>3</sup> The uncollectible overpayment amount, when expressed as a fraction of total benefit payments for the calendar year, is limited to the corresponding ratio of uncollectible overpayments to total benefits experienced by SSA.

**Part III.**

## Tables Pertaining to Administrative Cost Calculations

**Table 9. -- Calculation of OASDI Administrative Expenses - 2023**

Source	Total cost (thousands)	Number of Items		Unit cost
		Total	Chargeable	
<b>OASI Trust Fund</b>				
Total.....	<u>\$16,271</u>			
Determination of eligibility and benefit computations, OASI.....	6,644	13,200	-	13,200
Retired employees.....	2,772	5,500	-	\$503.98
Dependents of retired employees.....	3,269	6,500	-	502.87
Non-retired employees.....	-	-	-	503.98
Widow(er)s not on RRB rolls.....	-	-	-	502.87
Survivor monthly beneficiaries.....	603	1,200	-	502.87
Maintenance of benefit rolls.....	7,538	392,400	-	\$19.21
Handling compensation reports.....	147	344,800	-	0.43
Reimbursement of death master file payments.....	1,942			
<b>DI Trust Fund</b>				
Total.....	<u>\$2,031</u>			
Determination of eligibility and benefit computations, DI.....	1,236	500	-	500
Retired employees.....	900	400	-	\$2,250.26
Dependents of retired employees.....	336	100	-	3,362.87
Maintenance of benefit rolls.....	779	11,900	-	65.48
Handling compensation reports.....	16	344,800	-	0.05



**Table 9b. -- Calculation of OASDI Administrative Expenses - 2022 (revised)**

Source	Total cost (thousands)	Number of Items		Unit cost
		Total	Chargeable	
<b>OASI Trust Fund</b>				
Total.....	<u>\$14,580</u>			
Determination of eligibility and benefit computations, OASI.....	7,096	14,300	-	14,300
Retired employees.....	3,995	7,800	-	\$512.17
Dependents of retired employees.....	2,147	4,500	-	477.18
Non-retired employees.....	-	-	-	512.17
Widow(er)s not on RRB rolls.....	-	-	-	477.18
Survivor monthly beneficiaries.....	954	2,000	-	477.18
Maintenance of benefit rolls.....	7,373	396,800	-	\$18.58
Handling compensation reports.....	111	307,000	-	0.36
<b>DI Trust Fund</b>				
Total.....	<u>\$4,319</u>			
Determination of eligibility and benefit computations, DI.....	3,557	1,400	-	1,400
Retired employees <sup>1</sup> .....	2,237	1,000	-	\$2,237.37
Dependents of retired employees.....	1,320	400	-	3,299.98
Maintenance of benefit rolls.....	747	13,200	-	56.63
Handling compensation reports.....	15	307,000	-	0.05

1. One disability freeze record was added back as a result of data cleaning in the 73rd determination.

Table 9c. -- Calculation of HI Administrative Expenses - 2022 (revised)

Source	Total cost (thousands)	Number of Items		Unit cost
		Total	Chargeable	
<b>HI Trust Fund</b>				
Total.....	<u>\$2,289</u>			
Initial enrollment, OASI.....	1,028	14,300	-	14,300
Retired employees.....	579	7,800	-	7,800
Dependents of retired employees.....	311	4,500	-	4,500
Non-retired employees.....	-	-	-	-
Widow(er)s not on RRB rolls.....	-	-	-	-
Survivor monthly beneficiaries.....	138	2,000	-	2,000
Initial enrollment, DI.....	991	1,400	-	1,400
Retired employees.....	623	1,000	-	1,000
Dependents of retired employees.....	368	400	-	400
Maintenance of benefit rolls, OASI.....	158	396,800	-	396,800
Maintenance of benefit rolls, DI.....	75	13,200	-	13,200
Handling compensation reports.....	37	307,000	-	307,000
				0.12

**Part IV.****Summary of Income Tax Calculations****Table 10. -- Financial Interchange OASDI Income Tax Transfers, Calendar Years 1984-2023 and  
January-September 2024**

Year	Original Treasury Transfers		Adjusted Accrual Basis		Final FI Adjusted Taxes Due		
	Amount	FI Adjusted <sup>1</sup>	Taxes Due <sup>2</sup>		Cash Basis <sup>3</sup>		
			Amount	FI Adjusted	Total	OASI <sup>4, 5</sup>	DI <sup>4, 5</sup>
1984	\$68.0	\$58.8	\$36.0	\$31.1	\$58.8	\$57.0	\$1.8
1985	77.0	67.0	33.4	29.1	67.0	65.0	2.0
1986	69.0	70.4	29.3	29.9	70.4	68.3	2.1
1987	48.0	49.2	30.4	31.2	(13.8)	(12.0)	(1.8)
1988	41.0	42.0	32.4	33.2	3.5	4.2	(0.7)
1989	36.0	36.8	39.0	39.9	14.2	14.0	0.2
1990	39.0	39.6	45.0	45.7	30.8	30.5	0.3
1991	44.0	44.7	47.0	47.7	47.8	47.2	0.6
1992	48.0	48.6	46.0	46.6	54.7	53.9	0.8
1993	56.0	56.9	47.0	47.8	59.9	58.7	1.2
1994	52.0	52.5	48.0	48.5	50.5	49.4	1.1
1995	50.0	50.1	59.0	59.2	41.0	40.0	1.0
1996	57.0	57.1	75.0	75.1	57.1	55.9	1.2
1997	61.0	61.0	86.0	86.0	57.0	55.5	1.5
1998	74.0	73.9	88.0	87.9	73.9	72.1	1.8
1999	79.0	78.9	94.0	93.9	106.0	103.4	2.6
2000	102.0	102.0	105.0	105.0	128.0	124.5	3.5
2001	94.0	93.4	100.0	99.3	92.4	89.5	2.9
2002	97.0	96.5	93.0	92.5	110.5	106.7	3.8
2003	97.0	98.1	85.0	86.0	113.1	108.6	4.5
2004	109.0	109.2	91.0	91.2	112.2	107.3	4.9
2005	117.0	116.5	125.0	124.4	116.5	111.5	5.0
2006	125.0	124.4	149.0	148.2	130.3	124.5	5.8
2007	135.0	134.7	170.0	169.7	134.7	128.2	6.5
2008	144.0	143.7	168.0	167.6	109.6	104.2	5.4
2009	144.0	144.1	164.0	164.1	136.1	128.5	7.6
2010	159.0	158.9	182.0	181.9	158.9	151.3	7.6
2011	160.0	160.8	192.0	192.9	176.7	170.0	6.7
2012	194.0	195.5	211.0	212.6	278.2	273.8	4.4
2013	199.0	200.2	230.0	231.4	243.2	238.7	4.5
2014	250.0	251.8	251.0	252.8	251.8	243.8	8.0
2015	263.0	265.5	258.0	260.5	297.6	291.4	6.2
2016	281.0	284.2	265.0	268.0	301.3	295.2	6.1
2017	292.0	294.8	287.0	289.7	294.8	287.7	7.1
2018	255.0	258.0	275.0	278.3	290.2	288.8	1.4
2019	267.0	269.3	291.0	293.5	269.3	264.3	5.0
2020	289.0	293.6	278.0	282.4	293.6	288.6	5.0
2021	327.0	335.9			314.7	313.9	0.8
2022	257.0	366.3			366.3	361.7	4.6
2023	284.0	387.4			382.3	380.1	2.2
1/2024 - 9/2024	288.0	298.1			331.4	330.8	0.6

<sup>1</sup> Total amount of quarterly transfers from Treasury originally received for the calendar year.<sup>2</sup> The FI Amount is the total original Treasury transfers multiplied by a ratio of  $\left(\frac{FI\ Benefits}{SSEB\ Benefits}\right)$  for the appropriate year.<sup>3</sup> Revised Total Amount and FI Amount based on subsequent reconciliations.<sup>4</sup> Sum of FI Amount original transfers and any adjustments made in the year for prior calendar years. Amount for 9-month estimate year is calculated separately based on projected SSEB and FI Benefits for that period.<sup>5</sup> OASI/DI allocation is based on overall SSA OASI/DI income tax allocation experience for the calendar year.

**Table 10a. -- Financial Interchange HI Income Tax Transfers, Calendar Years 1994-2023 and  
January-September 2024**  
(in millions)

Year	Original Treasury Transfers		Treasury Adjustment		Final FI Adjusted Total <sup>3, 4</sup>
	Amount	FI Adjusted <sup>1</sup>	Accrual Basis <sup>2</sup>		
			Amount	FI Adjusted	
1994	\$14.0	\$14.0	\$1.0	\$0.9	\$0.0
1995	30.0	30.2	29.0	29.2	0.2
1996	30.0	30.0	35.0	35.0	0.0
1997	30.0	30.0	39.0	39.0	(0.1)
1998	31.0	31.0	27.0	27.0	0.0
1999	55.0	55.0	60.0	60.0	0.0
2000	50.0	50.0	52.0	52.0	0.0
2001	57.0	56.8	52.0	51.8	(0.2)
2002	58.0	57.7	53.0	52.7	(0.3)
2003	55.0	55.2	42.0	42.1	0.2
2004	53.0	53.3	46.0	46.3	0.3
2005	54.0	54.0	61.0	60.9	0.0
2006	64.0	63.6	81.0	80.5	(0.4)
2007	67.0	66.8	91.0	90.8	(0.2)
2008	76.0	75.9	97.0	96.9	(0.2)
2009	78.0	78.0	84.0	84.0	0.0
2010	86.0	86.0	89.0	89.0	0.0
2011	101.0	101.3	107.0	107.3	0.3
2012	121.0	121.8	129.0	129.9	0.6
2013	111.0	111.7	112.0	112.7	0.7
2014	153.0	154.0	159.0	160.0	1.0
2015	155.0	156.4	146.0	147.3	1.4
2016	177.0	178.8	165.0	166.7	1.9
2017	180.0	181.9	176.0	177.9	1.9
2018	176.0	177.8	184.0	185.9	1.8
2019	165.0	166.6	167.0	168.6	1.6
2020	194.0	196.3	184.0	186.1	2.3
2021	197.0	201.4			4.2
2022	230.0	236.4			6.4
2023	246.0	253.6			7.6
1/2024 - 9/2024	263.0	271.9			8.8

<sup>1</sup> Total amount of quarterly transfers from Treasury directly to the HI trust fund for the calendar year.

<sup>2</sup> The FI Amount is the total original Treasury transfers multiplied by a ratio of  $\left(\frac{FI\ Benefits}{SSEB\ Benefits}\right)$  for the appropriate year.

<sup>3</sup> Revised Total Amount and FI Amount based on subsequent reconciliations.

<sup>4</sup> Since the original Treasury transfers and subsequent reconciliations are made directly to the HI trust fund, the final FI amount results only from the difference between FI Benefits and SSEB Benefits.

Part V.

## Correspondence and Memoranda



April 3, 2025

Mr. Keith T. Sartain  
 Chief Actuary  
 Railroad Retirement Board  
 844 North Rush Street  
 Chicago, Illinois 60611-2092

Dear Mr. Sartain:

This letter provides the items you requested for use in the 73<sup>rd</sup> financial interchange determination in your letter to us dated January 13, 2025.

Below we present the effective interest rates earned by the Old-Age and Survivors Insurance (OASI) and Disability Insurance (DI) Trust Funds in calendar year 2024 on a semiannual and annual basis.

Period	OASI	DI
January-June 2024	1.19956%	1.57049%
July-December 2024	1.24801%	1.68963%
Calendar year 2024	2.46211%	3.29366%

Attachment A provides a memorandum from Stephen Hull, Director of SSA's Office of Finance within the Office of Financial Policy and Program Integrity (OFPPPI). The memorandum provides final workload unit cost factors for calendar year 2023 and preliminary factors for 2024. The final factors for 2023 have been revised from the preliminary factors we provided in our most recent prior letter dated March 18, 2024. The primary reason for these revisions is to now include the workload effects of work-related continuing disability reviews. These effects had inadvertently not been recognized in the workload unit cost factors following a change in SSA's accounting systems several years ago. The final factors have also been revised from the preliminary factors by incorporating actual data for 2023, whereas the preliminary factors were partially estimated.

Attachment B provides a table summarizing the operations of the OASI and DI Trust Funds for December 2024 and calendar year 2024, based on data from the Department of the Treasury and OFPPPI. The format of the table is consistent with the table for calendar year 2023, which we sent in our letter dated March 18, 2024.

In September 2024, the trust funds transferred amounts to the general fund for estimated refunds of taxes paid by employees whose combined wages from more than one employer exceeded the 2023 taxable maximum.<sup>1</sup> The entire amount of these refunds is included on the line labeled "Multi-employer tax refunds" in the attached table showing the operations of the trust funds (Attachment B). There were no such refunds in any other months of calendar year 2024.

<sup>1</sup> Also includes relatively small adjustments to estimates of prior multi-employer tax refunds for earnings in calendar years 2019 through 2022.

Calendar year 2024 data on cyclical payments by payment method are available on the internet at <https://www.ssa.gov/oact/progdata/payment.html>. For consistency with our treatment of accelerated benefit payments in our trust fund accounting, this cyclical payment data reflects benefit payments based on the normally scheduled payment date.

The requested annual ratios of uncollectible overpayments to total benefits are in Attachment C. Such ratios are to be used as limits on the amount of estimated uncollectible overpayments to be added to benefit payments chargeable to the Social Security trust funds through the financial interchange, as described in the August 2, 2004, letter from Stephen C. Goss to Frank Buzzi. Similar to such data for calendar years 2020 through 2023, the amounts of uncollectible overpayments in 2024 are significantly higher than in years prior to 2020. Based on previous discussion with OFPPI, this higher level is due to a special initiative undertaken by SSA during 2020.

If you require further information about any of this information, please let us know.

Sincerely,



Michael Stephens, A.S.A.  
Deputy Chief Actuary

Attachments: A-C

cc: Karen P. Glenn



## SOCIAL SECURITY

### MEMORANDUM

**Date:** April 2, 2025 **Refer To:** S1NN1

**To:** Supervisory Actuary  
Office of the Chief Actuary

**From:** Director  
Office of Finance

**Subject:** Workload Unit Cost Factors for the SSA-Railroad Retirement Board (RRB) Financial Interchange (Your Memo, 01/14/25)—INFORMATION

This memorandum transmits and documents the final calendar year (CY) 2023 and preliminary CY 2024 unit cost factors for use in the SSA-RRB financial interchange. The CY 2023 calculations had changes from those transmitted last year. The CY 2023 information included in this memorandum is revised primarily due to the preliminary CY 2023 data being based on estimated December 2023 values. The CY 2023 final value below are based on December 2023 actuals.

The unit costs are as follows:

<u>Workload</u>	CY 2023 <u>Final</u>	CY 2024 <u>Preliminary</u>
OASI Maintenance of Earnings Accounts *	\$ 0.425712	\$ 0.345617
DI Maintenance of Earnings Accounts *	\$ 0.047090	\$ 0.036831
HI Maintenance of Earnings Accounts *	\$ 0.129455	\$ 0.104621
OASI Initial Enrollment – Wage Earners	\$ 503.980163	\$ 482.832582
DI Initial Enrollment – Wage Earners	\$ 2,250.255661	\$ 2,236.693677
HI (OASI Related) Initial Enrollment – Wage Earners	\$ 74.582486	\$ 67.268831
HI (DI Related) Initial Enrollment – Wage Earners	\$ 712.034626	\$ 711.637964
OASI Initial Enrollment – Auxiliaries	\$ 502.869870	\$ 492.155485
DI Initial Enrollment – Auxiliaries	\$ 3,362.866531	\$ 3,384.812735
HI (OASI related) Initial Enrollment – Auxiliaries	\$ 74.418178	\$ 68.567709
HI (DI related) Initial Enrollment – Auxiliaries	\$ 1,064.091274	\$ 1,076.929429

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<u>Workload</u>	CY 2023 <u>Final</u>	CY 2024 <u>Preliminary</u>
OASI Maintenance of the Rolls	\$ 19.210962	\$ 18.046636
DI Maintenance of the Rolls	\$ 65.484237	\$ 53.609169
HI (OASI Related) Maintenance of the Rolls	\$ 0.492081	\$ 0.449719
HI (DI Related) Maintenance of the Rolls	\$ 10.477189	\$ 8.681697

Copies of the worksheets and backup materials used to calculate these unit costs are available upon request. Should your staff or the staff of RRB wish to discuss these computations, they should contact Nicole Wartman at (410) 966-9452.

Stephen  
Hull

Stephen Hull

Digitally signed by  
Stephen Hull  
Date: 2025.04.02  
08:16:59 -04'00'

## Financial Operations of the OASI and DI Trust Funds, December 2024

Old-Age and Survivors Insurance Trust Fund			
	Current month	Fiscal year to date	Calendar year to date
<b>Total income</b>	\$116,540,339,356.83	\$290,720,974,588.40	\$1,223,953,568,966.66
Payroll tax contributions	86,068,443,068.00	245,142,443,068.00	1,110,053,817,219.20
Multi-employer tax refund	0.00	0.00	-4,467,847,000.00
Net payroll tax contributions	86,068,443,068.00	245,142,443,068.00	1,105,585,970,219.20
Reimbursement income tax credits	73.30	73.30	1,893.88
Reimbursement due to P.L. 111-312, 112-78, and 112-96	-10,146.00	-10,146.00	-16,185.57
Transfer due to section 4003(e) of P.L. 116-136	0.00	244,130,465.19	244,130,465.19
General Fund reimbursement subtotal	-10,072.70	244,120,392.49	244,116,173.50
Income from benefit taxation	25,808,777.90	13,947,995,279.70	54,398,249,687.20
Interest on investments	30,446,084,472.16	31,385,359,477.13	63,728,690,980.84
Interest on reimbursements	13,111.47	1,046,371.08	-3,617,665.90
Interest subtotal	30,446,097,583.63	31,386,405,848.21	63,725,073,314.94
Gifts & miscellaneous income	0.00	10,000.00	159,571.82
<b>Total cost</b>	111,364,589,308.46	334,751,357,914.72	1,327,158,746,417.51
Benefit payments	110,959,605,260.04	333,622,786,315.11	1,316,423,626,244.27
Reimbursements (uncashed checks & misc.)	-6,206,657.81	-19,103,029.06	-77,441,928.56
Vocational rehabilitation payments	1,099,053.83	2,350,662.89	13,703,879.06
Benefits subtotal	110,954,497,656.06	333,606,033,948.94	1,316,359,888,194.77
SSA-RRB Financial Interchange	0.00	0.00	5,859,775,000.00
Treasury administrative expenses	65,626,206.48	173,935,319.39	667,852,778.92
SSA salaries & expenses	342,750,617.00	963,272,972.00	4,126,330,038.31
Construction	2,740,368.00	9,591,288.00	122,156,092.41
Offsetting miscellaneous income	-7,047.32	-11,516.14	28,278,194.46
Pension reform reimbursement	0.00	-378,547.15	-1,538,468.46
Reimbursement for SSA expenses	-1,018,491.76	-1,085,550.32	-3,995,412.90
Administrative expenses subtotal	410,091,652.40	1,145,323,965.78	4,939,083,222.74
<b>Net change in asset reserves</b>	5,175,750,048.37	-44,030,383,326.32	-103,205,177,450.85
Undisbursed balance	87,169,846.09	87,169,846.09	87,169,846.09
Invested asset reserves (book value)	2,538,197,719,000.00	2,538,197,719,000.00	2,538,197,719,000.00
<b>Asset reserves at end of month</b>	2,538,284,888,846.09	2,538,284,888,846.09	2,538,284,888,846.09

Disability Insurance Trust Fund			
	Current month	Fiscal year to date	Calendar year to date
<b>Total income</b>	\$17,460,710,599.73	\$44,921,566,412.87	\$193,803,103,715.45
Payroll tax contributions	14,619,201,214.70	41,632,201,214.70	188,504,004,670.00
Multi-employer tax refund	0.00	0.00	-758,691,000.00
Net payroll tax contributions	14,619,201,214.70	41,632,201,214.70	187,745,313,670.00
Reimbursement income tax credits	7.84	7.84	181.44
Reimbursement due to P.L. 111-312, 112-78, and 112-96	-1,722.91	-1,722.91	-2,748.51
General Fund reimbursement subtotal	-1,715.07	-1,715.07	-2,567.07
Income from benefit taxation	337,356.60	395,016,455.10	653,800,410.90
Interest on investments	2,841,164,793.14	2,893,796,481.82	5,394,295,150.64
Interest on reimbursements	8,950.36	553,976.32	9,692,710.98
Interest subtotal	2,841,173,743.50	2,894,350,458.14	5,403,987,861.62
Gifts & miscellaneous income	0.00	0.00	4,340.00
<b>Total cost</b>	13,056,131,016.29	39,598,690,970.76	157,594,735,953.56
Benefit payments	12,810,565,098.37	38,910,456,054.18	154,982,819,665.57
Reimbursements (uncashed checks & misc.)	-3,319,753.67	-9,354,299.86	-35,976,342.98
Vocational rehabilitation payments	5,025,691.99	11,400,698.12	66,447,395.47
Benefits subtotal	12,812,269,036.69	38,912,502,452.44	155,013,290,718.06
SSA-RRB Financial Interchange	0.00	0.00	73,686,000.00
Treasury administrative expenses	10,548,063.19	28,069,819.39	110,638,150.55
SSA salaries & expenses	232,044,613.00	651,976,368.00	2,314,536,427.13
Construction	1,964,562.00	6,875,967.00	85,168,754.27
Reimbursement for SSA expenses	-695,258.59	-757,143.72	-2,743,519.10
Demonstration projects	0.00	23,507.65	159,422.65
Administrative expenses subtotal	243,861,979.60	686,188,518.32	2,507,759,235.50
<b>Net change in asset reserves</b>	4,404,579,583.44	5,322,875,442.11	36,208,367,761.89
Undisbursed balance	74,563,306.44	74,563,306.44	74,563,306.44
Invested asset reserves (book value)	183,106,803,000.00	183,106,803,000.00	183,106,803,000.00
<b>Asset reserves at end of month</b>	183,181,366,306.44	183,181,366,306.44	183,181,366,306.44

## Notes:

- Fiscal year is the 12-month period ending September 30. See summary of [fiscal year data](#).
- Temporary tax credits were established by the 1983 Amendments (see footnote to our [tax rate table](#) for applicable years). The OASI and DI Trust Funds are reimbursed from the general fund of the Treasury for these tax credits.
- Income from taxation of benefits was established by the 1983 Amendments. A relatively small amount of this income is from taxation of benefits paid to non-resident aliens (deducted from monthly benefits). The remainder is transferred to the trust funds at the beginning of each calendar quarter on an estimated basis, with subsequent adjustment for actual income tax data. For further information, see [Taxation of Social Security Income](#).
- The "SSA-RRB Financial Interchange" is an annual transfer among the Social Security Trust Funds and the Railroad Retirement program's *Social Security Equivalent Benefit Account*. The transfers, computed by the Railroad Retirement Board, are designed to put the Social Security Trust Funds in the same financial position that they would have been if railroad employment had always been covered by Social Security.
- Offsetting miscellaneous income is composed of miscellaneous income due to the Trust Funds, which can include refunds, penalties, fees, and other income due to the Trust Funds.
- The Employee Retirement Income Security Act of 1974 requires that SSA furnish information on deferred vested benefits to pension plan participants. The general fund of the Treasury reimburses the OASI Trust Fund for the costs incurred by furnishing such information.
- Net change in asset reserves is calculated as total income less total cost.
- When a trust fund holds marketable securities, the book value differs from the face value of such securities. The OASI Trust Fund redeemed its marketable securities in November 1982; DI redeemed its last in February 2005. For special issues, book value is the same as face value.

**Ratio of uncollectible overpayments to total benefit payments**  
[Dollar amounts in thousands]

Calendar year	OASI Trust Fund			DI Trust Fund		
	Uncollectible overpayments	Total benefit payments <sup>a</sup>	Ratio	Uncollectible overpayments	Total benefit payments <sup>a</sup>	Ratio
1999	\$90,533	\$334,383,416	0.0271%	\$234,852	\$51,313,271	0.4577%
2000	95,287	352,651,519	0.0270%	264,862	54,920,576	0.4823%
2001	95,898	372,312,043	0.0258%	262,639	59,558,650	0.4410%
2002	116,271	388,118,781	0.0300%	342,519	65,627,224	0.5219%
2003	114,015	399,842,083	0.0285%	337,982	70,885,971	0.4768%
2004	115,636	415,031,484	0.0279%	343,713	78,180,163	0.4396%
2005	118,455	435,325,384	0.0272%	367,617	85,373,479	0.4306%
2006	143,851	460,404,994	0.0312%	498,697	92,357,903	0.5400%
2007	135,954	485,819,057	0.0280%	473,033	99,057,104	0.4775%
2008	190,680	508,994,214	0.0375%	556,943	106,271,269	0.5241%
2009	169,630	557,101,116	0.0304%	448,360	118,298,745	0.3790%
2010	168,014	577,390,879	0.0291%	463,123	124,162,037	0.3730%
2011	168,088	596,153,634	0.0282%	473,100	128,904,536	0.3670%
2012	148,672	637,892,767	0.0233%	450,078	136,849,591	0.3289%
2013	136,349	672,126,128	0.0203%	385,530	140,046,294	0.2753%
2014	120,188	706,777,966	0.0170%	319,036	141,600,507	0.2253%
2015	93,543	742,905,710	0.0126%	206,111	143,263,174	0.1439%
2016	101,550	768,598,740	0.0132%	190,877	142,684,346	0.1338%
2017	180,098	798,686,160	0.0225%	336,532	142,720,079	0.2358%
2018	194,288	844,887,862	0.0230%	311,010	143,637,104	0.2165%
2019	171,646	902,796,624	0.0190%	387,767	145,029,039	0.2674%
2020	477,569	952,348,936	0.0501%	2,546,309	143,466,468	1.7748%
2021	518,071	993,118,329	0.0522%	2,413,116	139,969,197	1.7240%
2022	411,954	1,088,117,619	0.0379%	1,837,496	143,447,292	1.2810%
2023	411,519	1,227,331,354	0.0335%	1,784,458	151,815,949	1.1754%
2024	441,631	1,316,346,184	0.0335%	1,763,831	154,946,843	1.1383%

<sup>a</sup> Payments are reduced for unnegotiated checks.

Sources: 1. Uncollectible overpayment amounts are from SSA's Office of Financial Policy and Program Integrity (OFPPI).  
2. Total benefit payments are computed based on input from OFPPI and the Bureau of the Fiscal Service in the U.S. Department of the Treasury.

Social Security Administration  
Office of the Chief Actuary  
April 3, 2025

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DEPARTMENT OF HEALTH & HUMAN SERVICES  
Centers for Medicare & Medicaid Services  
7500 Security Boulevard, Mail Stop 00-00-00  
Baltimore, Maryland 21244-1850



March 14, 2025

Mr. Carl May  
Bureau of the Actuary  
Railroad Retirement Board  
844 N. Rush Street  
Chicago, Illinois 60611-2092

Dear Mr. May:

The effective semi-annual rates of interest earned by the HI Trust Fund during the six months ending June 30, 2024 and December 31, 2024, were 1.53 percent and 1.75 percent, respectively.

If you have any questions, please contact me at [Jennifer.lee@cms.hhs.gov](mailto:Jennifer.lee@cms.hhs.gov).

Sincerely,

  
Jennifer Lee  
CMS/OACT



December 19, 2024

Mr. Keith Sartain  
Chief Actuary  
Railroad Retirement Board  
844 North Rush Street  
Chicago, Illinois 60611-2092

Dear Mr. Sartain:

The attached tables provide estimated benefits in current-payment status as of December 31, 2023. Table 1 relates to male retired worker beneficiaries and their beneficiary dependents. Table 2 presents the corresponding estimates for female retired worker beneficiaries. We first provided table 2 in our letter dated January 19, 2012, per agreement between our offices in August 2011 to revise the application of child and family composition factors.<sup>1</sup> The attached data were derived from 100-percent sample data.

Sincerely,

Michael Stephens, A.S.A.  
Deputy Chief Actuary

/S/  
Craig Feinstein  
Actuary

Enclosures: Tables 1-2

<sup>1</sup> See letter from Stephen C. Goss, dated August 19, 2011.

Table 1 — Selected benefit estimates relating to male old-age (primary) beneficiary families in current-payment status on 12/31/2023

Age	All old-age families			Beneficiary families consisting of a male old-age beneficiary with an aged wife receiving a full benefit whether or not children are present			Beneficiary families consisting of a male old-age beneficiary with a wife whose entitlement is based on having an eligible child in her care and is receiving a full benefit			
	Old-age benefits	Monthly rate of PIA	Child benefits	Old-age benefits	Monthly rate of PIA	Child benefits	Old-age benefits	Monthly rate of PIA	Child benefits	Wife benefits
62	\$408,702,326	\$578,550,362	\$9,959,240	\$931,999	\$1,321,031	\$8,543	\$1,286,739	\$1,824,496	\$754,409	\$579,836
63	624,012,635	869,725,539	16,136,610	1,755,049	2,449,946	37,237	2,093,439	2,932,894	1,213,975	938,247
64	815,319,278	1,099,045,890	18,233,512	2,685,687	3,624,220	51,287	2,482,597	3,379,860	1,378,282	1,108,026
65	1,141,426,553	1,446,939,673	21,392,195	4,841,632	6,047,410	70,607	3,122,647	4,048,791	1,654,591	1,334,800
66	1,991,695,068	2,292,668,348	31,212,204	12,150,363	13,574,039	196,328	4,656,189	5,556,226	2,270,598	1,854,065
67	3,031,992,088	3,303,341,758	44,067,262	28,138,337	29,481,497	414,263	6,738,348	7,517,359	3,066,976	2,502,858
68	3,158,445,154	3,393,999,160	42,703,261	38,765,132	39,720,186	630,347	6,095,646	6,647,577	2,699,337	2,223,506
69	3,143,970,366	3,336,738,579	39,458,096	49,932,975	49,989,163	810,005	5,543,287	5,966,251	2,442,830	1,994,369
70	3,415,654,403	3,469,024,183	36,008,333	79,156,142	74,937,781	983,251	4,984,075	5,206,200	2,138,891	1,749,392
71	3,345,001,239	3,407,252,466	33,781,995	99,105,265	93,238,132	1,206,458	4,353,690	4,512,621	1,829,260	1,529,151
72	3,119,569,687	3,201,447,622	29,428,883	103,829,814	97,485,932	1,178,797	3,250,263	3,375,142	1,360,801	1,156,540
73	2,851,284,080	2,946,674,535	25,689,630	104,284,292	96,878,199	1,127,766	2,667,244	2,760,616	1,135,176	931,309
74	2,772,188,786	2,892,385,000	23,825,329	113,855,217	104,292,363	1,199,429	2,554,062	2,640,565	1,090,743	895,672
75	2,685,413,747	2,833,911,897	22,017,879	111,783,721	102,832,856	1,185,270	1,878,195	1,952,046	799,995	657,699
76	2,661,932,675	2,836,392,714	20,198,318	107,460,555	99,793,075	1,152,748	1,668,159	1,732,719	727,423	587,225
77	2,311,830,421	2,482,556,334	17,057,208	89,954,369	84,483,191	952,329	1,213,300	1,269,965	527,446	432,095
78	1,783,672,955	1,924,688,277	12,666,438	63,539,078	60,326,151	752,151	831,454	862,583	362,549	288,002
79	1,684,252,644	1,830,906,615	11,382,168	54,070,555	52,085,650	683,307	601,872	637,365	254,878	222,308
80	1,642,726,615	1,799,132,835	10,324,508	48,410,395	47,128,548	641,028	579,666	622,505	251,199	213,473
81	1,499,851,612	1,647,907,657	9,258,817	39,014,602	38,672,619	592,922	433,118	452,987	183,080	157,777
82	1,246,570,899	1,372,039,947	7,379,773	30,184,841	30,169,604	478,381	335,007	365,191	155,703	123,613
83	1,071,827,176	1,179,535,385	6,099,582	24,256,647	24,538,915	439,804	242,275	261,476	107,416	88,288
84	914,196,611	1,004,553,419	5,078,455	19,210,962	19,508,683	353,353	163,896	177,658	71,889	60,546
85	818,589,147	898,261,604	4,244,241	16,473,531	16,786,774	336,580	98,853	105,137	42,916	36,531
86	685,304,467	748,632,481	3,334,815	13,707,937	13,975,519	253,022	78,550	85,091	36,962	29,243
87	554,762,845	605,741,894	2,589,065	10,488,184	10,716,548	180,781	63,570	67,709	28,257	23,650
88	466,058,859	508,343,956	2,066,963	8,817,836	9,016,511	146,959	39,932	42,877	16,905	13,766
89	383,688,444	415,848,651	1,676,390	8,146,149	8,215,605	139,416	26,066	28,189	11,475	10,986
90	307,174,665	330,237,024	1,274,309	7,121,064	7,030,436	107,097	14,084	15,731	5,945	5,945
91	263,893,917	282,409,119	1,072,541	6,700,204	6,464,943	87,900	16,725	18,200	6,871	6,350
92	208,455,082	220,988,822	830,158	5,517,604	5,210,324	60,049	2,343	2,375	688	688
93	165,355,786	174,776,356	633,032	4,195,331	3,909,269	42,995	12,570	12,896	4,829	4,829
94	119,456,885	125,610,095	427,089	2,877,645	2,665,459	21,530	1,731	1,834	1,098	366
95	89,220,039	94,177,629	343,672	2,114,873	1,979,716	27,741	4,256	4,210	1,356	1,357
96	64,885,991	68,187,237	231,856	1,288,661	1,205,091	4,026	4,311	4,758	1,952	1,952
97	42,678,865	44,925,212	128,352	745,725	707,528	8,132	0	0	0	0
98	28,866,504	30,234,444	95,536	494,931	464,134	5,428	0	0	0	0
99	17,891,318	18,729,335	68,694	305,758	288,782	3,337	0	0	0	0
100	11,146,016	11,579,348	35,512	136,104	132,574	2,966	1,481	1,424	595	595
101+	13,359,665	13,779,871	42,738	134,314	128,637	1,383	0	0	0	0
Total	51,562,325,510	55,741,881,269	512,454,656	1,316,583,478	1,261,477,036	16,574,952	58,139,638	65,093,523	26,637,294	21,765,052

Social Security Administration  
Office of the Chief Actuary  
December 19, 2024

Table 2 — Selected benefit estimates relating to female old-age (primary) beneficiary families in current-payment status on 12/31/2023

Age	All old-age families			Beneficiary families consisting of a female old-age beneficiary with an aged husband receiving a full benefit whether or not children are present			Beneficiary families consisting of a female old-age beneficiary with a husband whose entitlement is based on having an eligible child in his care and is receiving a full benefit			
	Old-age benefits	Monthly rate of PIA	Child benefits	Old-age benefits	Monthly rate of PIA	Child benefits	Old-age benefits	Monthly rate of PIA	Child benefits	Husband benefits
62	\$357,773,261	\$490,695,087	\$1,779,668	\$260,442	\$369,227	\$2,600	\$16,493	\$23,440	\$8,819	\$7,957
63	549,133,187	736,441,192	2,968,812	588,203	822,235	8,309	10,943	15,519	5,832	5,502
64	720,203,420	932,013,510	3,575,977	890,131	1,199,262	3,535	23,238	31,932	12,123	11,255
65	1,029,459,415	1,243,974,161	4,279,670	1,582,354	2,000,937	16,892	36,435	46,795	17,558	17,085
66	1,678,994,372	1,851,530,792	6,215,033	3,021,114	3,459,855	15,511	30,562	37,598	14,858	13,393
67	2,460,618,639	2,568,190,464	8,371,099	5,572,625	6,021,741	30,108	35,284	39,557	14,485	14,453
68	2,562,085,874	2,629,128,794	8,646,759	6,912,659	7,315,656	37,595	36,064	39,674	13,933	15,877
69	2,560,461,121	2,575,561,538	7,976,528	7,782,886	8,066,820	33,008	15,703	16,426	6,136	6,134
70	2,719,445,536	2,614,094,067	7,243,909	8,980,032	8,941,685	27,800	16,491	17,740	7,202	6,613
71	2,682,547,554	2,573,446,574	6,630,965	8,550,318	8,449,052	34,995	15,159	15,882	5,926	5,416
72	2,525,201,156	2,417,462,414	5,844,534	7,606,601	7,493,616	27,935	5,943	6,515	2,986	1,752
73	2,326,276,969	2,218,113,329	5,080,588	6,892,186	6,792,403	22,471	6,742	7,549	2,436	3,259
74	2,278,295,190	2,174,203,446	4,512,005	6,467,047	6,297,016	16,846	3,914	4,334	1,368	1,893
75	2,209,271,577	2,112,321,801	4,012,247	5,921,719	5,821,129	20,963	0	0	0	0
76	2,189,072,152	2,067,628,701	3,556,627	5,032,416	5,004,919	13,234	2,519	2,907	1,090	1,091
77	1,902,817,391	1,791,671,780	3,025,107	4,129,170	4,112,903	9,341	2,443	2,783	1,044	1,044
78	1,483,112,278	1,371,986,179	2,101,003	2,936,729	2,964,611	5,250	0	0	0	0
79	1,424,087,190	1,301,792,350	1,813,428	2,654,003	2,660,912	6,436	0	0	0	0
80	1,407,533,454	1,272,281,853	1,586,510	2,129,805	2,173,906	2,092	0	0	0	0
81	1,292,423,729	1,154,683,156	1,405,843	1,933,384	1,983,933	3,831	0	0	0	0
82	1,094,035,888	969,643,796	1,171,677	1,441,533	1,474,527	3,687	0	0	0	0
83	957,408,676	836,544,802	848,169	1,114,590	1,130,767	2,276	0	0	0	0
84	841,708,375	718,943,131	705,011	1,016,308	1,029,464	1,721	0	0	0	0
85	768,829,916	644,548,574	584,433	740,080	755,479	1,369	0	0	0	0
86	663,050,555	542,047,057	507,551	558,807	563,829	310	0	0	0	0
87	566,528,229	446,957,226	348,487	375,363	375,939	827	0	0	0	0
88	496,704,516	380,715,729	256,098	276,795	269,740	0	0	0	0	0
89	425,059,672	318,800,874	188,545	201,405	200,585	0	0	0	0	0
90	351,081,320	259,824,001	142,093	145,240	138,826	0	0	0	0	0
91	313,208,311	230,756,502	104,504	103,387	97,990	245	0	0	0	0
92	260,198,350	184,920,060	91,857	84,181	80,421	0	0	0	0	0
93	216,780,275	150,619,705	67,950	53,876	51,669	167	0	0	0	0
94	171,992,613	117,163,708	49,028	34,896	34,336	0	0	0	0	0
95	138,396,667	95,012,840	36,767	17,087	16,049	0	0	0	0	0
96	108,084,095	74,148,995	25,259	15,581	13,518	0	0	0	0	0
97	78,250,298	53,001,597	16,173	2,290	2,386	0	0	0	0	0
98	56,980,760	39,045,857	15,207	3,554	3,676	0	0	0	0	0
99	39,255,934	26,518,289	8,265	1,628	761	0	0	0	0	0
100	25,467,846	17,009,467	9,271	2,685	2,496	0	0	0	0	0
101+	41,478,027	27,559,533	9,830	0	0	0	0	0	0	0
Total	43,973,313,788	42,231,002,930	95,812,484	96,033,105	98,194,275	349,354	257,933	308,651	115,796	112,724

Social Security Administration  
Office of the Chief Actuary  
December 19, 2024



## **EXHIBIT 2 – PAYROLL CALCULATIONS AND GROSS EARNINGS SAMPLE**

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### **Part I.**

#### Payroll Calculations Summary and Tables

#### **Accrued Taxable Payroll**

Accrued taxable payroll, as developed for financial interchange purposes, is the amount of railroad compensation to which combined employee and employer tax rates are applied to obtain additional accrued gross taxes (including overpayments of employee taxes) that would have been paid into the Old-Age and Survivors Insurance (OASI), Disability Insurance (DI) or Hospital Insurance (HI) Trust Funds if railroad employment were covered by the Federal Insurance Contributions Act (FICA).

Table 1 shows the maximum taxable earnings bases under the Railroad Retirement Act (RRA) and FICA. Tables 2 and 3 summarize the various components that determine accrued taxable payroll for calendar years 1937-1965 and 1966-2023, respectively.

The general methodology and assumptions governing the development of the OASDHI taxable payroll for financial interchange purposes are covered individually below.

#### **RRA Creditable Payroll**

The RRA creditable payroll for 2023, including sickness payments and miscellaneous compensation, was \$21,744.1 million. This amount is based on reports submitted by the railroads and third-party payors to the Railroad Retirement Board (RRB). Beginning in 1985, RRA compensation is creditable up to an annual limit rather than a monthly limit. This limit, \$160,200 in 2023, is the same as FICA.

Prior year adjustments of \$43.08 million were added to the RRA creditable payrolls for 1982-2022. No prior year adjustments for years before 1982 were made in this determination, and the 1981 prior year adjustment amount remains unchanged.

#### **Inflation Factor for HI Payroll**

Inflation factors are developed from the sample gross earnings data, as described in Part II. Prior to 1985, inflation factors were the ratio of compensation under the annual FICA limit to compensation under the monthly RRA limit. Beginning in 1985, the RRA creditable limit became annual and equal to the FICA limit, so inflation factors were unnecessary for calendar years 1985-1990. Beginning in 1991, a higher taxable limit applied to payroll under the HI portion of the FICA contribution rate. Consequently, inflation factors were reinstated for HI payroll calculations. Beginning in 1994, the HI limit was removed entirely and all wages are subject to HI payroll taxes.

The amount of earnings that would have been subject to the HI portion of the FICA tax rate was estimated from a sample of accounts for which records of gross earnings (including sickness payments and miscellaneous compensation) were obtained from railroad employers. From these records, annual earnings data were gathered that indicated the RRA creditable compensation and total HI earnings for each sample record.

For 2023, the total sample amounts subject to HI and RRA taxes were, respectively, \$225,017,414 and \$214,533,567. Therefore, the 2023 ratio for inflating OASDI and HI taxable payroll is 1.0489. HI payroll calculations are elaborated upon further in Part II.

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**RRA Payroll up to FICA Limit**

Prior to 1985, various adjustments and factors have been applied to RRA payroll to inflate it to OASDI levels. A summary of such adjustments and factors is included in the 41<sup>st</sup> Financial Interchange Summary and Documentation for Fiscal Year 1992, pages 62-63, with accompanying tables. Since 1985, OASDI payroll has been equal to RRA creditable payroll plus other adjustments. HI payroll equaled OASDI payroll through 1990. Since 1991, HI payroll equals the OASDI payroll times the inflation factor.

**Multiple Railroads Employment and Miscellaneous Compensation Adjustment**

Beginning in 1985, the employer RRA tax applies to the taxable compensation up to the annual limit earned by each employee, as has been the case under FICA. Under both systems, the employee's overall tax is limited by the annual maximum, even if the employee works for more than one employer. Thus, when an employee works with multiple employers and earns more than the FICA limit over the course of a year, the employee excess taxes are refundable, but the employer excess is not.

This is complicated somewhat by the inclusion of miscellaneous compensation, primarily sick pay, which became taxable and creditable in 1982. Third party miscellaneous compensation payors such as insurance companies and the RRB automatically withhold FICA taxes from the employee's payment. Consequently, such withholdings that exceed the maximum taxable amount are refundable to the employee.

The situation for railroad employers, however, is different. Insurance companies and the RRB notify them of the amount of benefits paid, and they in turn remit to the Internal Revenue Service (IRS) only that amount payable up to the annual limit for the employee. Consequently, employers generally do not pay excess FICA taxes on miscellaneous compensation.

Thus, it is necessary to determine both the amount and the source of payroll amounts in excess of annual FICA limits. Excess tax amounts resulting from multiple employment are paid for by both employers and employees, but refundable only to employees. Excess amounts resulting from miscellaneous compensation are paid only by employees and are fully refundable.

Full records of employer and miscellaneous payroll have been kept since 1989. Since records for 1982-1988 are not available, experience for these years was extrapolated from 1989-1991 experience.

The following equations are used to determine the miscellaneous pay/multiple railroad employment adjustment since 1989. They employ the following definitions relating to data for employee  $i$  and railroad employer  $j$ :

- $C_{ij}$  = Compensation for employee  $i$  from railroad  $j$
- $B_i$  = Railroad Retirement Board sickness payments for employee  $i$
- $I_i$  = Insurance company sickness payments for employee  $i$
- $L$  = Annual FICA payroll limit
- $R$  = Number of annual railroad employers
- $N$  = Number of employees

The total excess payroll,  $A$ , for a given year is calculated as follows:

$$A = \sum_{i=1}^N \text{Max} \left\{ \left( \sum_{j=1}^R C_{ij} \right) + B_i + I_i - L, 0 \right\}$$

That portion of total excess payroll due to multiple railroads employment,  $B$ , is:

$$B = \sum_{i=1}^N \text{Max} \left\{ \left( \sum_{j=1}^R C_{ij} \right) - L, 0 \right\}$$

Therefore, the amount of excess payroll due to multiple railroads employment is given by  $B$ , and the excess payroll attributable to miscellaneous compensation is given by  $(A - B)$ . These formulas are problematic in certain cases where there is a combination of multiple employment and miscellaneous compensation within a year. Experience indicates, however, that these instances are very rare.

### **Dual Coverage Wage Adjustment and Sampling Error**

Dual coverage is the estimate of the amount of Social Security wages earned and taxed that would have exceeded FICA limits had all railroad compensation been subject to FICA. For 2023, the amounts involved for an affected employee would be combined earnings under both systems in excess of \$160,200 but not in excess of \$160,200 under either system separately.

We estimate this adjustment using data received from SSA that contains OASDI wages for the Gross Earnings (see Part II) sample individuals. Combined earnings over the OASDI limit that are subject to the OASDI limits under either system are inflated to yield an estimate of the universe amount of employee refunds that would have been payable from this source.

The dual coverage wage adjustment estimate of \$72.7 million for 2023 was obtained using the formula:

$$A = \frac{N}{n} \sum_{i=1}^n X_i$$

- where  $A$  = estimated dual coverage adjustment for the universe
- $X_i$  = dual coverage amount in excess of the Social Security wage base for sample account  $i$
- $N$  = universe number
- $n$  = sample number

The standard error of \$24.9 million for 2023 was computed for these estimates from the formula:

$$S_A^2 = \frac{N(N-n)}{n^2(n-1)} \left\{ n \sum_{i=1}^n X_i^2 - \left( \sum_{i=1}^n X_i \right)^2 \right\}$$

Using the standard error, the 95 percent confidence interval was \$24.0 million to \$121.4 million for 2023.

Only the employee tax rates apply to dual coverage refunds. For 2023, the OASI inflated tax refund amount was \$3.85 million and the 95 percent confidence interval was \$1.27 million to \$6.44 million, while the DI inflated tax refund amount was \$0.65 million and the 95 percent confidence interval was \$0.22 million to \$1.09 million.

### **Final FICA Accrued Payroll**

The final annual FICA accrued payroll, as shown in Tables 2 and 3, is the amount of railroad compensation to which combined employee and employer tax rates may be applied to obtain additional gross taxes (including overpayments of employee taxes) that would have been paid into the OASI, DI or HI Trust Funds if railroad employment were covered by FICA.

For years 1937-1965, the final accrued payroll is calculated as the net of (1) RRA payroll not in excess of the FICA limit, plus (2) compensation over the RRA monthly limit but not over the FICA limit, plus (3) the multiple railroad employment adjustment, less (4) 75 percent of dual coverage self-employment adjustment.

For years 1966-1987, the final accrued payroll is calculated as the net of (1) RRA creditable payroll inflated to under the annual FICA limit, plus (2) the multiple railroad employment adjustment, less (3) 50 percent of tips, less (4) sickness payments, less (5) the self-employment adjustment.

For years 1988 and later, the final accrued payroll is obtained by adding to the RRA creditable payroll up to the FICA limit the multiple railroad employment/miscellaneous compensation adjustment.

The OASDI accrued payroll for 2023 is \$21,755.9 million. The HI accrued payroll for 2023 is \$22,806.7 million.

### **Accrued Payroll under the Affordable Care Act**

Beginning in calendar year 2013, the Affordable Care Act (ACA) imposes an additional employee Medicare tax of 0.9 percent on earnings above \$200,000 (for those who file an individual return) or \$250,000 (for those who file a joint return). The 0.9 percent tax is withheld from earnings above \$200,000 regardless of filing status. Because the taxable thresholds are applied separately to FICA earnings and railroad compensation, households with both FICA earnings and railroad compensation whose combined earnings are in excess of the taxable limits pay less tax than if all of their earnings were covered under FICA. An adjustment to the total accrued amount over \$200,000, the HI ACA payroll, is therefore required for the resulting shortfall of additional taxes that would have been collected if railroad employment was covered under FICA.

The \$539.0 million HI ACA payroll for 2023 was derived from gross earnings data reported by employers. A shortfall adjustment of \$3.7 million for 2021 was made in December 2023. Table 4 summarizes the various components that determine the HI ACA payroll and the shortfall adjustment.

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**FICA Payroll Taxes on Cash Basis**

The financial interchange requires that both the amount and pattern of FICA taxes that would have been collected from the final accrued OASDHI payroll be determined. To determine the pattern, a quarterly payroll distribution was estimated using the Gross Earnings study (see Part II). Quarterly pay for sample employees was accumulated over each quarter, up to the \$160,200 annual limit for 2023 for each employee. The resulting sample quarterly distribution was then applied to the overall population. Beginning with the 39<sup>th</sup> determination, the pattern of payment was further refined by applying second-degree curves to the quarterly payrolls to determine hypothetical monthly distributions (see Financial Interchange Summary and Documentation: 35th determination, pages 60-70; 36th determination, pages 41-43; 39th determination, pages 73-77). Finally, for calendar years before 1993, the monthly payroll results were further adjusted to reflect the measurable lag period between payroll disbursement and actual collection of FICA taxes thereon. This was discontinued beginning with calendar year 1993.

The table below shows the quarterly dollar and percentage distributions of the sample OASDI accrued payroll for 2023 and the resulting distribution of the accrued OASDI payroll. For the purpose of these tables, the sample amounts were limited to those employees for whom monthly or quarterly data were reported.

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	Sample Amount <sup>1</sup>	Percentage Distribution	OASDI Payroll (millions)
Total .....	\$165,965,304	100.00	\$21,755.9
1st Quarter .....	52,453,614	31.61	6,877.0
2nd Quarter .....	37,957,182	22.87	4,975.6
3rd Quarter .....	38,549,598	23.23	5,053.9
4th Quarter .....	37,004,911	22.29	4,849.4

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<sup>1</sup> Numbers may not add up due to rounding.

Similar calculations were performed for HI payroll, with the exception of the application of any annual covered earnings limit.

	Sample Amount <sup>1</sup>	Percentage Distribution	HI Payroll (millions)
Total .....	\$171,953,254	100.00	\$22,806.7
1st Quarter .....	52,874,889	30.75	7,013.1
2nd Quarter .....	38,762,661	22.54	5,140.6
3rd Quarter .....	39,563,223	23.01	5,247.8
4th Quarter .....	40,752,482	23.70	5,405.2

<sup>1</sup> Numbers may not add up due to rounding.

The table below shows the quarterly dollar and percentage distribution of the sample HI ACA accrued payroll for 2023 and the resulting distribution of the HI ACA accrued payroll.

	Sample Amount <sup>1</sup>	Percentage Distribution	HI ACA Payroll (millions)
Total .....	\$2,818,404	100.00	\$539.0
1st Quarter .....	276,981	9.83	53.0
2nd Quarter .....	617,670	21.92	118.1
3rd Quarter .....	560,452	19.89	107.2
4th Quarter .....	1,363,300	48.36	260.7

<sup>1</sup> Numbers may not add up due to rounding.

Preliminary estimates were made of the quarterly accrued payroll for the first nine months of 2024 based on presumed employment levels and wage increases. Under the OASDI annual limit of \$168,600 for 2024, estimated accrued payroll for January-September 2024 was \$16,724.4 million. The total HI estimated accrued payroll for January-September 2024 was \$17,191.5 million of which \$371.1 million was subject to the 0.9 percent additional Medicare tax.

**Table 1. -- Annual Maximum Taxable Earnings Under the RRA and FICA**

Year	RRA Limit <sup>1</sup>	FICA Limits	
		OASDI	HI
1937-1950	\$300	\$3,000	---
1951	300	3,600	---
1952	300	3,600	---
1953	300	3,600	---
1954	300/350 <sup>2</sup>	3,600	---
1955	350	4,200	---
1956	350	4,200	---
1957	350	4,200	---
1958	350	4,200	---
1959	350/400 <sup>3</sup>	4,800	---
1960	400	4,800	---
1961	400	4,800	---
1962	400	4,800	---
1963	400/450 <sup>4</sup>	4,800	---
1964	450	4,800	---
1965	450	4,800	---
1966	550	6,600	\$6,600
1967	550	6,600	6,600
1968	650	7,800	7,800
1969	650	7,800	7,800
1970	650	7,800	7,800
1971	650	7,800	7,800
1972	750	9,000	9,000
1973	900	10,800	10,800
1974	1,100	13,200	13,200
1975	1,175	14,100	14,100
1976	1,275	15,300	15,300
1977	1,375	16,500	16,500
1978	1,475	17,700	17,700
1979	1,908	22,900	22,900
1980	2,158	25,900	25,900
1981	2,475	29,700	29,700
1982	2,700	32,400	32,400
1983	2,975	35,700	35,700
1984	3,150	37,800	37,800

See footnotes at the end of table.

**Table 1. -- Annual Maximum Taxable Earnings Under the RRA and FICA (Continued)**

Year	RRA Limit <sup>1</sup>	FICA Limits	
		OASDI	HI
1985	\$39,600	\$39,600	\$39,600
1986	42,000	42,000	42,000
1987	43,800	43,800	43,800
1988	45,000	45,000	45,000
1989	48,000	48,000	48,000
1990	51,300	51,300	51,300
1991	53,400	53,400	125,000
1992	55,500	55,500	130,200
1993	57,600	57,600	135,000
1994	60,600	60,600	No Limit
1995	61,200	61,200	No Limit
1996	62,700	62,700	No Limit
1997	65,400	65,400	No Limit
1998	68,400	68,400	No Limit
1999	72,600	72,600	No Limit
2000	76,200	76,200	No Limit
2001	80,400	80,400	No Limit
2002	84,900	84,900	No Limit
2003	87,000	87,000	No Limit
2004	87,900	87,900	No Limit
2005	90,000	90,000	No Limit
2006	94,200	94,200	No Limit
2007	97,500	97,500	No Limit
2008	102,000	102,000	No Limit
2009	106,800	106,800	No Limit
2010	106,800	106,800	No Limit
2011	106,800	106,800	No Limit
2012	110,100	110,100	No Limit
2013	113,700	113,700	No Limit
2014	117,000	117,000	No Limit
2015	118,500	118,500	No Limit
2016	118,500	118,500	No Limit
2017	127,200	127,200	No Limit
2018	128,400	128,400	No Limit
2019	132,900	132,900	No Limit
2020	137,700	137,700	No Limit
2021	142,800	142,800	No Limit
2022	147,000	147,000	No Limit
2023	160,200	160,200	No Limit
2024	168,600	168,600	No Limit

<sup>1</sup> Earnings bases are monthly through 1984 and annual thereafter.

<sup>2</sup> The RRA limit was \$300 for the first six months of 1954, raised to \$350 for the last six months of the year.

<sup>3</sup> The RRA limit was \$350 for the first six months of 1959, raised to \$400 for the last six months of the year.

<sup>4</sup> The RRA limit was \$400 for the first six months of 1963, raised to \$450 for the last six months of the year.

Table 2. -- Summary of Accrued Taxable Payroll Calculations, 1937-1965

(in millions)

Year	RRA Creditable Payroll	RRA Payroll Up to FICA Limit <sup>1</sup>	FICA Level Payroll Exceeding RRA Monthly Limit	Multiple RR Employment Adjustment	Dual Coverage Self Employment	Final FICA Accrued Payroll
1937	\$2,264.3	\$2,136.2	\$4.0	\$0.5		\$2,140.7
1938	2,007.5	1,912.1	4.0	0.5		1,916.6
1939	2,145.3	2,118.1	4.0	0.5		2,122.6
1940	2,248.2	2,217.6	3.9	0.6		2,222.1
1941	2,656.9	2,616.8	4.8	0.8		2,622.4
1942	3,301.7	3,228.5	8.3	1.4		3,238.2
1943	3,944.4	3,825.8	13.0	2.3		3,841.1
1944	4,301.4	4,134.2	15.0	3.3		4,152.5
1945	4,340.0	4,181.3	16.4	3.1		4,200.8
1946	4,639.5	4,423.9	22.5	4.3		4,450.7
1947	4,750.3	4,486.8	20.8	5.2		4,512.8
1948	4,951.5	4,592.5	24.8	7.1		4,624.4
1949	4,609.3	4,262.7	26.0	6.8		4,295.5
1950	4,704.3	4,334.1	29.6	7.3		4,371.0
1951	5,111.4	5,111.4	111.9	5.7	\$1.6	5,227.8
1952	5,046.2	5,046.2	118.4	6.5	2.5	5,169.2
1953	4,989.3	4,989.3	106.3	7.9	1.2	5,102.6
1954	4,706.7	4,527.0	55.7	8.4	2.2	4,589.5
1955	4,924.6	4,924.6	116.7	7.0	10.3	5,040.6
1956	5,059.7	5,059.7	126.5	13.1	14.8	5,188.2
1957	4,859.5	4,859.5	127.8	16.7	6.6	4,999.1
1958	4,246.4	4,246.4	149.9	18.4	8.5	4,408.3
1959	4,377.1	4,377.1	321.4	22.7	9.7	4,713.9
1960	4,403.8	4,403.8	137.8	16.8	10.6	4,550.5
1961	4,076.5	4,076.5	127.6	14.7	10.1	4,211.2
1962	3,990.8	3,990.8	129.3	15.3	9.8	4,128.1
1963	3,954.8	3,906.7	113.7	18.1	15.7	4,026.7
1964	4,210.9	3,890.4	75.9	17.4	20.1	3,968.6
1965	4,139.5	3,794.1	63.5	16.2	23.1	3,856.5

<sup>1</sup> Taxable payroll for employees age 65 and over is excluded in 1937-1938.

**Table 3. -- Summary of Accrued Taxable Payroll Calculations, 1966-2023**  
(Dollar amounts in millions)

Year	RRA Creditable Payroll	Prior Year <sup>1</sup> & Coverage Adjustments	RRA Payroll Up to FICA Limit	Multiple Railroad & Miscellaneous Comp Adjustment	1/2 Tips	Miscellaneous Adjustments <sup>2</sup>	Final OASDI Accrued Payroll	HI Payroll Inflation Factor	Final HI Accrued Payroll <sup>3</sup>	Final HI ACA Accrued Payroll <sup>4</sup>
1966	\$4,717.0	\$1.8	\$4,834.4	\$11.4	\$0.5	\$20.9	\$4,824.5			
1967	4,611.6	1.4	4,747.4	11.7	0.3		4,758.9			
1968	4,994.8	5.1	5,126.1	8.8	0.2		5,134.7			
1969	4,960.3	6.1	5,122.5	8.8	0.1		5,131.2			
1970	4,893.6	2.1	5,062.2	10.9	0.1		5,073.1			
1971	4,824.4	5.5	5,023.2	12.6	0.0	1.2	5,034.5			
1972	5,346.5	3.1	5,526.3	8.8	0.0	2.4	5,532.7			
1973	6,262.1	2.6	6,471.2	9.2	0.0	3.6	6,476.9			
1974	7,268.0	2.8	7,458.0	11.3	0.0	3.6	7,465.7			
1975	7,105.8	6.3	7,361.0	9.6	0.0	5.1	7,365.5			
1976	7,833.1	15.0	8,115.7	15.2	0.0	5.6	8,125.3			
1977	8,468.3	14.9	8,725.6	4.7	0.0	1.2	8,729.2			
1978	8,991.1	10.6	9,383.4	8.8	0.0	0.3	9,392.0			
1979	11,132.3	36.6	11,557.3	13.5	0.0	0.2	11,570.6			
1980	11,828.3	42.9	12,163.2	9.7	0.0		12,172.8			
1981	12,333.3	(64.4)	12,572.5	6.3	0.0		12,578.8			
1982	11,785.5	(14.8)	12,152.8	6.8	0.0		12,159.5			
1983	11,711.6	(7.0)	11,964.4	13.4	0.0		11,977.8			
1984	12,332.0	(2.1)	12,570.0	5.6	0.0		12,575.6			
1985	12,113.9	(1.8)	12,112.1	14.2	0.2		12,126.1			
1986	11,968.9	(1.4)	11,967.6	14.2	0.0		11,981.8			
1987	11,878.0	(1.9)	11,876.1	35.3	0.0		11,911.4			
1988	11,661.2	(13.2)	11,648.1	20.5			11,668.5			
1989	11,517.8	(5.0)	11,512.8	12.2			11,525.0			
1990	11,390.4	(7.3)	11,383.1	9.9			11,393.0			
1991	11,575.3	(11.4)	11,563.9	12.4			11,576.4	1.0415	\$12,044.0	
1992	11,901.4	(4.9)	11,896.5	15.7			11,912.3	1.0581	12,588.2	
1993	11,719.8	(3.0)	11,716.8	12.3			11,729.1	1.0612	12,434.4	
1994	11,888.6	2.7	11,891.2	9.8			11,901.0	1.0522	12,511.7	
1995	11,918.0	(3.1)	11,914.9	13.5			11,928.3	1.0644	12,682.2	
1996	12,224.1	(3.4)	12,220.8	14.2			12,235.0	1.0585	12,935.8	
1997	12,508.5	(1.7)	12,506.8	17.2			12,524.1	1.0538	13,179.2	
1998	13,166.1	(3.3)	13,162.8	19.6			13,182.4	1.0785	14,195.8	
1999	13,325.7	(3.8)	13,321.8	38.8			13,360.6	1.0777	14,357.4	
2000	13,362.2	(3.8)	13,358.3	9.5			13,367.8	1.0516	14,047.2	

See footnotes at the end of table.

**Table 3. -- Summary of Accrued Taxable Payroll Calculations, 1966-2023 (Continued)**  
(Dollar amounts in millions)

Year	RRA Creditable Payroll	Prior Year <sup>1</sup> & Coverage Adjustments	RRA Payroll Up to FICA Limit	Multiple Railroad & Miscellaneous Comp Adjustment	1/2 Tips	Miscellaneous Adjustments <sup>2</sup>	Final OASDI Accrued Payroll	HI Payroll Inflation Factor	Final HI Accrued Payroll <sup>3</sup>	Final HI ACA Accrued Payroll <sup>4</sup>
2001	\$13,247.7	(\$3.3)	\$13,244.4	\$8.2			\$13,252.6	1.0352	\$13,711.1	
2002	13,113.7	(3.5)	13,110.2	8.0			13,118.2	1.0345	13,562.8	
2003	13,263.0	(1.5)	13,261.6	9.7			13,271.3	1.0474	13,889.7	
2004	13,871.3	(0.8)	13,870.6	7.8			13,878.4	1.0535	14,612.7	
2005	14,565.1	(0.9)	14,564.2	8.6			14,572.8	1.0588	15,420.7	
2006	15,033.7	(0.4)	15,033.3	9.5			15,042.8	1.0759	16,174.1	
2007	15,619.6	(0.7)	15,618.9	10.7			15,629.6	1.0785	16,845.1	
2008	16,203.2	(0.5)	16,202.8	11.0			16,213.8	1.1057	17,915.8	
2009	15,342.5	(0.5)	15,342.0	7.6			15,349.6	1.0585	16,239.4	
2010	15,440.6	(0.4)	15,440.1	7.7			15,447.9	1.0541	16,275.7	
2011	16,573.5	(0.4)	16,573.1	10.3			16,583.4	1.0775	17,857.3	
2012	17,351.3	(0.3)	17,351.0	11.4			17,362.4	1.1252	19,523.2	
2013	17,773.2	(0.4)	17,772.8	12.7			17,785.5	1.0532	18,718.3	\$593.1
2014	19,217.1	(0.5)	19,216.5	16.7			19,233.3	1.0772	20,699.4	851.6
2015	19,988.7	(0.6)	19,988.1	12.8			20,000.9	1.0684	21,354.3	624.1
2016	18,315.8	(0.1)	18,315.7	9.6			18,325.3	1.0648	19,502.0	629.1
2017	18,506.2		18,506.2	12.1			18,518.3	1.0637	19,685.6	656.8
2018	19,667.1		19,667.1	13.2			19,680.3	1.0517	20,683.7	403.6
2019	19,190.7		19,190.7	11.4			19,202.1	1.0523	20,194.5	444.0
2020	17,480.0	(0.5)	17,479.6	9.3			17,488.9	1.0302	18,007.8	317.9
2021	17,115.1		17,115.1	10.7			17,125.8	1.0479	17,935.1	138.7
2022	18,642.3		18,642.3	12.0			18,654.3	1.0481	19,538.9	412.3
2023	21,744.1		21,744.1	11.8			21,755.9	1.0489	22,806.7	539.0

<sup>1</sup> Prior year adjustments for 1966-1981. Beginning with 1982, prior year adjustments are reflected in the RRA creditable payroll column.

<sup>2</sup> Self-employment income in 1966, sickness payments in 1971-1979.

<sup>3</sup> RRA payroll up to FICA limit times HI inflation factor. After 1993, HI limit on taxable pay was removed and all compensation is taxable.

<sup>4</sup> RRA payroll above \$200,000 per individual subject to additional 0.9 percent HI tax under ACA.

**Table 4. -- Summary of Accrued Taxable Payroll Calculations Under ACA, 2013-2023  
(in millions)**

Year	Additional Medicare Tax		Final HI ACA	Shortfall <sup>1</sup> Amount	Shortfall Adjustment Date <sup>2</sup>
	Compensation		Accrued Payroll		
	Regular	Miscellaneous			
2013	\$592.0	\$1.1	\$593.1	\$1.2	Dec 2015
2014	839.5	12.1	851.6	1.4	Dec 2016
2015	624.1	0.0	624.1	1.7	Dec 2017
2016	628.4	0.7	629.1	1.8	Dec 2018
2017	655.6	1.2	656.8	2.4	Dec 2019
2018	403.6	0.0	403.6	1.8	Dec 2020
2019	444.0	0.0	444.0	3.0	Dec 2021
2020	317.6	0.3	317.9	3.3	Dec 2022
2021	138.7	0.0	138.7	3.7	Dec 2023
2022	412.3	0.0	412.3		Dec 2024
2023	539.0	0.0	539.0		Dec 2025

<sup>1</sup> Difference between payroll taxes actually collected and the amount that would have been collected under FICA.

<sup>2</sup> Adjustments are scheduled for December of the second year after the year for which the tax is collected.

**Part II.**2023 Gross Earnings Sample for Financial  
Interchange Payroll Calculations**Design of the Sample**

All railroad employers were asked to report the 2023 gross earnings of a one-percent sample of their employees. Sample employees were those with social security account numbers ending in "30". Employers with 5,000 or more employees were asked to supply monthly or quarterly gross earnings data for the sample employees. Smaller employers could supply monthly, quarterly or annual gross earnings figures. The full 2023 gross earnings one-percent sample consisted of 2,329 records.

The gross earnings sample is used to determine the dual coverage payroll adjustment, the inflation factor for calculating the HI payroll, and the quarterly payroll distribution estimate.

A comparison of the average RRA creditable compensation (exclusive of miscellaneous compensation) and average service months for all employees based on the tabulation of all 2023 creditable earnings records and the gross earnings sample is as follows:

	Number of Employees	Average Compensation	Average Months of Service
All employees .....	236,282	\$ 91,129	10.16
Gross earnings sample .....	2,329	\$ 91,205	10.18

In addition, the representation of the universe by the sample was checked by means of Chi-square tests applied to distributions of employees by service months and by compensation (excluding miscellaneous compensation) creditable under the RRA. The Chi-square statistics of the gross earnings sample versus the expected numbers based on 100-percent data were tested at a 95-percent credibility level.

Results are shown in the following table.

Service months	Gross earnings sample	Expected number	Taxable compensation	Gross earnings sample	Expected number
Total	2,329	2,329		2,329	2,329
0	96	110	Under \$5,000	124	132
1	46	54	\$5,000-\$9,999	56	59
2	63	49	\$10,000-\$14,999	44	48
3	42	44	\$15,000-\$19,999	33	37
4	43	41	\$20,000-\$24,999	29	32
5	34	38	\$25,000-\$29,999	30	27
6	47	37	\$30,000-\$34,999	34	27
7	44	40	\$35,000-\$39,999	34	27
8	39	41	\$40,000-\$44,999	33	29
9	51	43	\$45,000-\$49,999	36	32
10	54	55	\$50,000-\$54,999	36	37
11	75	65	\$55,000-\$59,999	34	44
12	1,695	1,712	\$60,000-\$64,999	63	54
			\$65,000-\$69,999	58	64
			\$70,000-\$74,999	86	78
			\$75,000-\$79,999	98	99
			\$80,000-\$84,999	109	110
			\$85,000-\$89,999	110	106
			\$90,000-\$94,999	99	109
			\$95,000-\$99,999	118	112
			\$100,000-\$104,999	105	107
			\$105,000-\$109,999	96	104
			\$110,000-\$114,999	101	96
			\$115,000-\$119,999	117	95
			\$120,000-\$124,999	74	82
			\$125,000-\$129,999	79	76
			\$130,000-\$134,999	69	70
			\$135,000-\$139,999	71	65
			\$140,000-\$144,999	48	57
			\$145,000-\$149,999	48	50
			\$150,000-\$154,999	37	42
			\$155,000-\$160,199	44	42
			\$160,200	176	180
Degrees of freedom		12			32
Chi-square		13.991			23.046
95% Threshold		21.026			46.194

The above Chi-square values are below the acceptable limit defined by the 95-percent credibility level. From this, and the comparison of averages, it may be concluded that the 2023 gross earnings sample adequately represents the universe of employee data and should produce valid estimates.

### Sampling Errors in Financial Interchange HI Tax Calculation

It is estimated that accrued HI taxes (excluding ACA amounts) on railroad payrolls in calendar year 2023, had railroad employment been covered under HI, would have amounted to \$661.4 million. The estimate was obtained by applying the HI tax rate to the RRA taxable payroll after it was adjusted to include compensation in excess of the OASDI limit. The estimated 95-percent confidence interval for this adjustment was +/- \$13.9 million. Since the RRA total taxable payroll is available on a 100-percent basis, this is the only error inherent in the estimate. Thus, the 95-percent confidence interval for 2023 HI taxes was \$647.5 million to \$675.3 million.

The adjustment calculation uses the following definitions:

- A = estimated difference between payroll under the RRA annual creditable limit and total HI taxable payroll
- $X_i$  = HI taxable payroll for sample account i
- $Y_i$  = RRA creditable payroll for sample account i
- N = universe number
- n = sample number
- B = Universe amount of RRA creditable payroll

The formula for the adjustment amount, A, is:

$$A = \left[ \frac{\sum_{i=1}^n X_i}{\sum_{i=1}^n Y_i} - 1 \right] B$$

This calculation gave A = \$1,062.6 million.

The standard error  $S_A$  associated with this estimate is computed from the formula:

$$S_A^2 = \frac{N(N-n)}{n(n-1)} \left\{ \sum_{i=1}^n X_i^2 + R^2 \sum_{i=1}^n Y_i^2 - 2R \sum_{i=1}^n X_i Y_i \right\}$$

where

$$R = \frac{\sum_{i=1}^n X_i}{\sum_{i=1}^n Y_i}$$

The standard error computed by the formula was \$245.0 million. The 95-percent confidence interval was \$582.3 million to \$1,542.9 million.